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ABSTRACT

This manual was prepared to provide local school districts with a model to follow in implementing a local planning-programing-budgeting system (PPBS). Section I (chapters 1-4) gives the basic concepts and overall design of a PPB system for local districts. Section II (chapters 5-7) describes computations used in a semiautomated PPBS version, provides guidelines for cost allocations to programs, and describes data files. Section III contains instructions for filling out data cards to use the semiautomated version. Appendixes illustrate the type of input needed and the type of output received from the computerized version. Related documents are ED 043 930 and EA 003 871. (Page 108 is missing in the original, and pages 25, 138, and 156-166 may reproduce poorly because of marginal legibility.) (Author/RA)

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LOCAL SCHOOL DISTRICT

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INTERMEDIATE UNIT PLANNING STUDY

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PLANNING-PROGRAMMING-BUDGETING SYSTEM

FOR SCHOOL DISTRICTS

VERSION III, MODEL 1

June, 1971

An Intermediate Unit Planning Study conducted by:

The Public Schools of Bucks, Cameron, Elk, McKean, Montgomery and Potter Counties of the Commonwealth of Pennsylvania.

Dr. George E. Raab, Superintendent
Bucks County Public Schools
Mr. Philip M. Jones, Superintendent
Cameron County Public Schools
Mr. William A. Anderson, Superintendent
Elk County Public Schools
Dr. Robert Stromberg, Superintendent
McKean County Public Schools
Dr. Allen C. Harman, Superintendent
Montgomery County Public Schools
Mr. William Stavitsky, Superintendent
Potter County Public Schools

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Project No. 67-4280

For further information direct inquires to: Dr. Albert M. Neiman,
Assistant Executive Director, Bucks County Public Schools,
Administration Building, Doylestown, Pa. 18901

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This manual is a modification of a PPBS which underwent extensive testing with school districts in Bucks, Cameron, and McKean Counties, including the following:

1. Central Bucks School District -

   H. Ronald Huber, Jr., Superintendent

2. Cameron County School District -

   James Manners, Superintendent

3. Morrisville School District -

   Paul Phillips, Superintendent

4. Pennsbury School District -

   William W. Ingraham, Superintendent

5. Port Allegany School District -

   Albert Skelton, Superintendent

6. Smethport Area School District -

   Dimitro Bourandas, Superintendent

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HOW TO USE THIS MANUAL

A Planning-Programming-Budgeting System (PPBS) is a process; it is not a manual, nor a series of directions, nor a collection of data forms completely filled or blank. With this in mind, this manual was prepared to provide local school districts with a model to follow in implementing a local PPBS. No attempt was made to develop and describe all the detailed activities, forms, and logistics. To do so would create a manual or series of manuals too voluminous to be practical. Furthermore, each school district is unique with unique needs, limiations, and capabilities that are known only to the district personnel. For this reason it is left to the user to design and implement the techniques most appropriate for their local situation.

Section I, (the first four chapters), was prepared to give the user the basic concepts and overall design of the PPBS. It is recommended that they be read as a unit to get an over-view, then individually to get the detail necessary to implement the system. When implementation is begun these chapters should be used as reference material.

Chapter one introduces PPBS as it is conceived the developers. It may be helpful to the user to supplement this chapter with other readings. If this chapter is supplemented with other materials it will be apparent that PPBS as conceived here is only one of many ways; it is hoped that the user will reserve judgement of this system until it has been fully utilized.

Chapter two describes the program structure used to prepare a program budget which is the core of the PPBS. It is suggested that the school district begin PPBS implementation by developing a program budget using the structure presented in Chapter one. The structure presented is compatable with that

of the Pennsylvania Department of Education, and is general and gross enough that the local school district can develop subprograms - if desired - to get more detail. Development of subprograms is left to the user because it is felt that only the district personnel are in a position to create meaningful subprograms for the individual districts.

After a Program Budget is developed with sufficient detail to satisfy the user, Chapter three should be used as a guide in developing Programming techniques for evaluating outputs of the programs. Again, the programming presented in Chapter three is general and gross; this is necessary because of the grossness of the program structure. As local officials are the only personnel capable of developing meaningful subprograms, so they are the appropriate personnel to develop meaningful programming techniques and output measures for these subprograms.

At this point in the discussion it is appropriate to note two things: (1) the local school district can and should refine, or attempt to refine, program structure and programming techniques which will be desirable and useful to them, i.e., if the program structure and programming methods are adequate at the level presented or if the effort required is too great for the benefits received, do not attempt to refine either programming or program structure and (2) program budgeting can be implemented without programming and program budgeting and programming can be implemented without planning, but good planning requires both program budgeting and programming, i.e., the user can use the program budget alone or the programming and program budget together, but cannot proceed to the planning phase without both.

Chapter four outlines a planning cycle designed to use the program structure and programming described in the Chapters two and three. There has been no attempt in this chapter to set deadlines, make staff assignments, or define management activities. This was not done because the intent was to develop a general system which could be used by all size districts, some with only one staff member assigned to PPBS, some with a large staff assigned, some with a highly trained staff, and some with an untrained staff. Under these circumstances only the personnel involved and familiar with the local facilities and constraints can determine the most efficient and effective management activities.

Section II, (Chapters five through seven) is designed to describe the computations used in the semi-automated version, to provide guidelines for allocation of costs to programs, and describe the data files. These chapters should be referred to when the user begins to design forms, develop files, and collect data for implementation. They are of necessity general in nature but should be referred to when the district begins to do the practical work of implementing a PPBS.

Chapter five is basically a documentation chapter which describes the logic and nature of the computation involved. This chapter can be used in conjunction with Appendix B which contains a computer printout of the PPBS. Chapter six describes methods to allocate resources to the programs and projects. Chapter seven describes the data files needed to support the PPBS.

Section III contains instructions for filling out data cards to use the semi-automated version of this PPBS. After the users have developed the program budget described in Chapter two, designed programming as in Chapter three and prepared to implement the planning cycle described in Chapter four,

then they should use Chapter five, six, and seven to guide the supporting activities.

When all the data has been collected, Section III should be used to arrange the data for processing with the semi-automated version. Appendix C (the simulation) can be used with Appendix B (A sample printout) to illustrate the type of input needed and the type of output received from the computerized version.

SECTION I

CHAPTER ONE

INTRODUCTION TO PPBS

Planning-Programming-Budgeting (PPB) is the general term applied to a set of inter-related management planning activities. The essence of this relationship is the systematic development and presentation of information about costs and benefits of alternative courses of action relevant to resource allocation. Specifying this relationship permits an organization to better allocate resources among alternative methods of attaining its objectives.

A PPBS provides a framework for relating the activities of management in a systematic way that will help to clarify objectives and make improved allocation decisions. The PPBS approach has several distinctive characteristics such as identifying objectives, considering future implications, multi-year planning, and analyses of alternative approaches.

PPBS focuses on identifying the objectives of the organization and determining ways of measuring or estimating progress toward these objectives. All programs, projects and activities of the organization, regardless of their placement in the organization, are related to these objectives. A set of activities which contributes toward the achievement of an objective or set of objectives is called a project or program.

The PPBS approach considers the implications of future conditions, which requires forecasts of future demands on the organization, future resources available, and the capability of current programs and projects to meet the objectives of the organization.

Multi-year planning is an essential part of the PPBS approach. Long range plans are broken down into specific groups of activities (programs or projects) to be undertaken in each of the next five years. Both capital and operating costs are shown for each year in each program. The five-year plan includes the financial plans for providing revenues and resources needed to accomplish the activities included in it. The first year of the five-year plan and financial plan becomes the basis for the budget which implements the first year plan.

The PPBS approach provides the framework for analyzing the merits of alternative projects for achieving the organization's objectives. By setting out measurable objectives, the manager and his staff are able to assess the degree to which different alternative projects would meet these objectives. By estimating the total costs of each alternative and comparing the results that would be achieved by each course of action, the manager is aided in choosing the alternative to implement.

The process of planning, programming, and budgeting is repeated annually so that planned action is regularly revised in view of actual experience in carrying out the first year of the multi-year plan. Thus the approach provides a way of helping the organization keep its plans up to date.

Having identified some of the major characteristics of a PPBS System, the specific elements that are involved in the creation of a PPBS for the local school district must be considered. Given current laws and policies under which local school districts are operating, several input forecasts are critical. Forecasts of expected student enrollment and of expected revenue by major source affect each PPB cycle. These forecasts of pupil

and revenue inputs must be made for each year in the five year plan. The methods of forecasting include statistical procedure and judgmental estimates by school administrators in arriving at reasonable forecasts. An example of judgments would be estimates of special revenues contingent on state or federal funding of a proposed project.

The grouping of activities into broad program categories is of considerable importance in planning and programming. The general program structure developed as part of this manual takes into account common activities of school districts and is designed to be compatible with the program structure of the Pennsylvania Department of Education.

In addition to the twenty-three continuous programs a number of continuous subprograms particularly for the instructional programs were developed. Also, provision is made for an indeterminate number of projects to be used in the development of a five-year plan.

The goal of the plan is to find that collection of projects which when added to the twenty-three programs will have the best chance of achieving a set of objectives. Because projects are the product of the local school district staff's desire to respond to a particular problem, no effort has been made to develop a detailed project classification system. However, projects are grouped into two general categories - (1) Operations and (2) Capital Improvement.

Indicators

One of the most difficult tasks in designing a PPB System is the task of providing measures of effectiveness for specific objectives. The ideal method would be to find a single measure of the output and relate all

activities to that final measure of effectiveness. In the case of education and other complex public services, there is no known way to produce a single, valid measure of output. Under these circumstances, an alternate approach is to identify indicators of major variables which, when interpreted by experienced policy officials, indicate possible needed action. Examples of such indicators now in use by school administrators include variations of pupil-teacher ratio and grade achievement scores.

The indicators developed for the PPBS have been selected to serve as general reference points for estimating implications of present programs and projects or planned projects. They are also valuable in terms of setting objectives by allowing school district staffs and boards to set levels which they wish to achieve for each indicator. It is desirable that staffs and boards set more specific objectives and measures for each important program, project, or activity.

Forecasting the financial and operational implications of continuing programs and projects is also an essential part of the PPBS approach. These forecasts provide a means of testing the practicality of plans and permit estimates to be made of their effect on indicators.

Five-year plans show where the school district expects to be in the future and how it intends to get there. These plans include all major programs and projects, and takes into account input forecasts, operational forecasts and estimates of indicator levels. The plans represent policy decisions; they do not include details of operations or finances, but focus on results to be achieved and on major program and project changes.

Multi-year programs and projects show the allocation of resources

among major programs and projects in each of the five years of the plan. The first year of the five-year plan becomes the basis for the annual budget which can be prepared with confidence that budgeted activities will be compatible with the steps to be taken in following years.

The annual budget represents acceptance of the first year of the five-year plan. The approved budget gives authority to take action and expend resources, while the five-year plan represents policy guidelines and <u>does not</u> give specific authorization. The format of the annual budget is not of direct importance to the PPB System. The annual budget may be a line item-budget or a program budget, as long as there is a way of relating the first year of the plan to the type of budget in use.

The program structure and definitions to be used in the PPBS and the program budget are presented in the next chapter.

CHAPTER TWO

PROGRAM STRUCTURE AND DEFINITIONS

The program definitions and associated manpower definitions for the PPBS are presented in this chapter. It is important to note that the program structure described here was developed within the framework and therefore the constraints of the program structure of the Pennsylvania Department of Education (DOE). This was done to provide the local school districts with a PPBS which is compatable with that of the DOE in the hope it will aid communications between the agencies.

The structure of the DOE has three levels: (1) categories, (2) sub-categories, and (3) elements. Because the element is the basic building block of the state structure, attempts were made to tie the school district programs to these elements. Where it was not feasible for the school district program to correspond to an element of the state, subprograms were defined to coinside with the appropriate element. See Appendix A for DOE structure.

In an attempt to provide a program structure which is meaningful to the local school district while at the same time correspond to the elements of the Department of Education's PPBS, twenty-three (23) programs have been identified. These programs are listed in Table I.

Seventeen (17) of the programs correspond to the elements in the State's program structure. The remaining six (6) programs which correspond to the State's categories or sub-categores include sub-programs (projects) which are equivalent to elements in the State's PPBS structure. All the sub-programs may not be appropriate for all school districts because the services

TABLE I

Program Numbers and Titles

Number	Program Title
1	Executive Offices
2	Long Range Planning
3	Public Relations
4	Social Services
5	Intermediate Units
6	Early Childhood Instruction
7	Elementary Instruction
8	Secondary Instruction
9	Vocational-Technical Instruction
10	Special Instruction
11	Compensatory Programs
12	Guidance
13	Health Services
14	Inservice Training
15	Legal Services
16	Psychological
17	Boards and Commissions
18	PPBS
19	Pupil Transportation
20	Food Services
21	Maintenance and Operation
22	Employees Benefits
23	Informations Systems Design and Operation

for the program may be provided by some other agency. An example of this would be vocational-technical instruction provided by an Area Vocational School.

The PPBS requires that non-salary costs, capital outlay, and salary costs be determined for each of the programs and projects. The non-salary costs are determined for each of the programs from the actual allocated expenditures for materials and services. The capital outlay must be pro-rated where appropriate; for example, the costs of a middle school must be pro-rated over the Elementary Instruction and Secondary Instruction Programs. The salary cost for the man power types listed in Table II are to be assigned to the program with which they are associated as shown in Table III. Some of these salary costs may have to be pro-rated over various programs; this is particularly likely with the administrative and clerical personnel.

The following man-power and program definitions are presented to assist in identifying costs and assigning personnel to the program.

TABLE 2

Manpower Number and Types

Number	Manpower Type
1	Professional Administration
2	Administrative Staff
3	Teachers-Early Childhood Instruction
4	Teachers-Elementary Instruction
5	Teachers-Secondary Instruction
6	Teachers-Vocational-Technical Instruction
7	Teachers-Special Instruction
8	Teachers-Compensatory

TABLE 2 (CONTD)

Manpower Number and Types

Number	Manpower Type
9	Instructional Specialists
10	Medical Personnel
11	Psychologists
12	Clerical Personnel
13	Guidance Counselors
14	Maintenance Personnel
15	Transportation Personnel
16	Food Service Personnel
17	Technicians

TABLE 3

Manpower Types Associated with Programs

Program	Manpower Types	Manpower Number
1. Executive Offices	Professional Administration	(1)
	Administrative Staff	(2)
	Clerical Personnel	(12)
2. Long Range Planning	Professional Administration	(1)
	Administrative Staff	(2)
3. Public Relations	Professional Administration	(1)
	Administrative Staff	(2)
4. Social Services	Professional Administration	(1)
	Administrative Staff	(2)
5. Intermediate Units	Professional Administration	(1)
	Clerical Personnel	(12)
6. Early Childhood Instruction	Teachers-Early Childhood	(3)
	Instructional Specialists	(9)
	Technicians	(17)

TABLE 3 (CONTD)

Manpower Types Associated with Programs

Programs	Manpower Types	Manpower Number
7. Elementary Instruction	Teachers-Elementary	(4)
	Instructional Specialists	(9)
	Technicians	(17)
8. Secondary Instruction	Teachers-Secondary	(5)
	Instructional Specialists	(9)
	Technicians	(17)
9. Vo-Tech Instruction	Teachers Vocational Technical	(6)
	Instructional Specialists	(9)
	Technicians	(17)
10. Special Instruction	Teachers-Special Instruction	(7)
	Instructional Specialists	(9)
	Technicians	(17)
11. Compensatory Programs	Teachers-Compensatory	(8)
	Instructional Specialists	(9)
	Technicians	(17)
12. Guidance	Guidance Counselors	(13)
13. Health Services	Medical Personnel	(10)
	Clerks	(12)
14. Inservice Training	Administrative Staff	(2)
	Instructional Specialists	(9)
15. Legal Services	None	(0)
16. Psychological	Psychologists	(11)
17. Boards and Commissions	Clerical Personnel	(12)
18. PPBS	Professional Administration	(1)
	Administrative Staff	(2)
	Clerical Personnel	(12)
19. Pupil Transportation	Transportation Personnel	(15)
20. Food Services	Food Service Personnel	(16)
21. Maintenance	Maintenance Personnel	(14)
22. Employee Benefits	None	(0)
23. Informations Systems Design and Operation	Administrative Staff	(2)
	Clerical Personnel	(12)
	Technicians	(17)

Manpower Definitions

Type 1, Professional Administration includes all personnel who are responsible for major executive decisions and policy formulation. The superintendent, the assistant superintendent and the assistant to the superintendent are considered professional administrators. Also included in this manpower type are those professional personnel who by assignment or title are held responsible for the duties normally discharged by the above professionals.

Type 2, Administrative Staff, are those certified administrative personnel who assist and advise the professional administrator in the formulation and execution of policy. Included in this manpower type are principals, assistant principals, and other personnel who by title or assignment are responsible for the duties normally discharged by the principal or assistant principal. Also included are department heads, and other personnel responsible for implementing executive policy and provide services directly to the administrators.

Type 3, Teachers-Early Childhood Instruction are those certified personnel who are assigned to teach children at the Kindergarten level or below.

Type 4, Teachers-Elementary Instruction are those certified personnel who are assigned to teach children in any of the grades from one to six.

Type 5, Teachers-Secondary Instruction are those certified personnel who are assigned to teach children in any of the grades from seven to twelve.

Type 6, Teachers-Vocational-Technical Instruction, any of those certified personnel who are assigned to teach children those subjects or

courses defined as vocational or technical by the Pennsylvania Department of Education.

Type 7, Teachers - Special Instruction, any certified personnel who are assigned to teach those children who are identified as special education pupils.

Type 8, Teachers - Compensatory, any certified personnel who are assigned to teach those children who are enrolled in the compensatory education program.

Type 9, Instructional Specialists, those personnel who are specialists in one or more of the curriculum areas and are assigned to assist and consult with the classroom teachers and other professionals on curriculum matters and teaching strategies. Librarians are also included as instructional specialists.

Type 10, Medical Personnel, those licensed medical professionals who are responsible for the medical and dental care of the school children. This includes all physicians, dentists, and nurses on the school payroll.

Type 11, Psychologists, those licensed psychologists who are charged with the diagnosis and/or treatment of pupils with psychological problems.

Type 12, Clerical Personnel, those non-professional personnel who are responsible for typing, filing, office management, etc.

Type 13, Guidance Counselors, those certified personnel who are assigned to guidance programs.

Type 14, Maintenance Personnel, those non-professional personnel who are assigned to the repair, maintenance and operation of the physical facilities and property owned and operated by the school district.

Type 15, Transportation Personnel, those non-professional personnel who are responsible for the operation and maintenance of the school owned buses. This manpower type includes bus drivers, mechanics, and bus service personnel.

Type 16, Food Service Personnel, those non-professionals who are responsible for the operation of the school owned and operated cafeterias. This includes dietians, cooks, and other cafeteria staff.

Type 17, Technicians, those semi-professional personnel who are assigned to assist the professionals on the staff. Teacher aides are classified as technicians.

Program Definitions

PROGRAM 1, Executive Offices (0101), that part of the executive direction activities which involve policy decisions, implementation of policy and administration of policy by professional educators and staff. The activities of the Superintendent and the assistant superintendents as the chief executives are part of this program. That part of the principal's, assistant principal's, and department head's activities which are concerned with advising, assisting, implementing, and administering policy are also included in this program.

PROGRAM 2, Long Range Planning (0102), that part of the executive direction activities which involve development of long range estimates of future school and community variables to be used to forecast and/or develop future district operations.

When these activities are undertaken by personnel also involved in the Executive offices or other programs, the salaries must be pro-rated over the various programs.

PROGRAM 3 - Public Relations (0202), that part of the immediate staff service activities concerned with information and liaison with the public. This includes information dissemination to the newspapers, radio, and other media.

When the professional administration is responsible for these and other programs the salary must be pro-rated into this program. When a professional public relations agent is responsible for these activities he will be classed as an administrative staff and the entire salary will be placed in this progam.

PROGRAM 4 - Social Services (4404), that part of the pupil personnel services activities which involve utilization of the services of the state and local social service agencies. Included in this program are any social services provided directly by a school employed social or case worker who will be classified as administrative staff.

PROGRAM 5 - Intermediate Units (4601), that part of the administrative and facility support activities which are concerned with the procurement and use of the services of the Intermediate Unit.

Normally this will appear as a non-salary cost based on the assessment levied on the school district by the Intermediate Unit Board. Occassionally there may be personnel assigned to coordinate the utilization of the Intermediate Unit services within the district. Under these circumstances the salaries of the personnel must be pro-rated.

PROGRAM 6 - Early Childhood Instruction (1000), those instructional activities directed toward the children in kindergarten, nursery school, and other non-compensatory early childhood instruction.

Under this program there may be several sub-programs which will be treated

as projects affecting the program. The teachers, the instructional specialists, and the para professionals within the program may have to be prorated across the following sub-programs:

A. Extra-curricular Activities, those activities which are not part of the regular classroom instruction; they include organized school sponsored student activities such as athletics, clubs, music organizations, and theatrical productions.

B. Instructional Research (1002), those activities concerned with research studies in instruction. This does not include evaluation and program review. The man power type normally responsible for the major thrust of these activities are the instructional specialists.

C. Program Development and Dissemination (1003), those activities designed to create, adapt, modify, and disseminate information about instructional activities and curriculum. Again these activities normally would be the responsibility of the instructional specialists with the aid and assistance of the other manpower types.

D. Faculty Development (1004), those activities directed toward improving the quality of the faculty. This does not include in-service training, but does include reimbursement of faculty for expenses incurred by attending graduate school, seminars, and professional meetings. Normally this will be a program with only non salary costs.

E. Instructional Media (1005), those activities directed to development, maintenance, and distribution of audio-visual and other instructional media. Normally these activities will be the responsibility of an instructional specialist and/or para-professional. In those situations where instructional media activities are handled by a central office for all the instructional programs, cost must be pro-rated.

F. Innovative Programs (1006), those activities involved in new and unusual instructional and/or instructional support programs which may be assigned to teachers, instructional specialists and/or para-professionals.

G. School Evaluation and Program Review (1007), activities other than Instructional Research which are directed toward evaluation of the total Early Childhood Instructional Program. The activities of this subprogram may be assigned to any or all of the manpower types under the program.

PROGRAM 7 - Elementary Instruction (1200), those instructional activities directed toward the non-special education and non-compensatory pupils in grades one through six. Included in this program are the activities of elementary teachers, instructional specialists and para-professionals (teachers-aides).

Under this program there may be several subprograms which will be treated as projects affecting the programs. These following subprograms have the same names as the other instructional programs and are defined as they are under the Early Childhood Program:

A. Extra-Curricular Activities
B. Instructional Research (1202)
C. Program Development and Dissemination (1203)
D. Faculty Development (1204)
E. Instructional Media (1205)
F. Innovative Programs (1206)
G. School Evaluation and Program Review (1207)

PROGRAM 8 - Secondary Instruction (1400), this program is defined the same as program 6 (Early Childhood Instruction) and Program 7 (Elementary Instruction) except this program is concerned with pupils in grades seven through twelve. The manpower types are similar and the following sub-programs are names and defined as in programs six and seven:

A. Extra-Curricular Activities
B. Instructional Research (1402)
C. Program Development and Dissemination (1403)
D. Faculty Development (1404)
E. Instructional Media (1405)
F. Innovative Programs (1406)
G. School Evaluation and Program Review (1407)

In this program as in programs six and seven, all the program costs cannot be placed in the subprograms defined above. At this stage of development there seems to be two reasonable options. One option is to calculate

the cost for the six subprograms and place the rest of the cost in the program itself; this is possible because the subprograms are treated as projects and their costs are eventually added to the total program. The second option is to add another subprogram to make the set inclusive; the appropriate subprogram would be named Teaching and would be defined as those activities designed to nurture the intellectual growth of the pupils in the respective programs.

PROGRAM 9 - Voc-Tech Instruction (Cat. V), those activities for which the school district is receiving a state or federal subsidy under the laws dealing with vocational-technical instruction. The manpower types associated with this program are teachers, instructional specialists, and para-professionals.

With the advent of regional vocational-technical schools, it is expected that most school districts will have a single non-salary cost for this program which reflects their assessment per pupil served by the area Vocational-Technical school. However, for those schools which conduct a complete or partial vocational program the following subprograms can be treated as projects:

A. Regular Secondary Education (3201)
B. Handicapped Secondary Education (3202)
C. Disadvantaged Secondary Education (3203)
D. Work-Study Secondary Education (3204)
E. Regular Post Secondary Education (3401)
F. Handicapped Post Secondary Education (3402)
G. Disadvantaged Post Secondary Education (3403)
H. Work-Study Post Secondary Education (3404)
I. Cooperating Post Secondary Education (3405)
J. Adult Job Oriented Occupational Education (3601)
K. Instructional Research (3802)
L. Program Development and Dissemination (3803)
M. Faculty Development (3804)
N. Instructional Media (3805)
O. Innovative Programs (3806)

P. School Evaluation and Program Review (3807)
Q. Adult Enrichment Programs (4201)
R. Adult Basic Education (4204)
S. Recreation Services (4203)

PROGRAM 10 - Special Instruction (Cat. III), those activities for which the school district is receiving a state or federal subsidy under the laws dealing with special education. Special education teachers, instructional specialists, and para-professionals are the personnel types whose activities are included in this program. In most school districts the responsibility of the special education programs will be assumed by the intermediate unit and the cost will appear as a payment for the services. However, for those districts which also have a local program the following subprograms are to be used where appropriate:

A. MentallyHandicapped Children in Public Schools (1601)
B. Mentally Handicapped Children in Approved Private Schools (1602)
C. Mentally Handicapped Homebound Children (1603)
D. Physically Handicapped Children in Public Schools (1801)
E. Physically Handicapped Children in Approved Private Schools (1802)
F. Physically Handicapped Homebound Children (1803)
G. Gifted Children in Public Schools (1804)
H. Gifted Children in Approved Private Schools (1802)
I. Gifted Homebound Children (1803)
J. Program Development Dissemination (2101)
K. Faculty Development (2102)
L. Instructional Media (2103)

The above subprograms are self defining. It is expected that no single school district will use all sub-programs so they will be treated as projects that effect the special education program.

PROGRAM 11 - Compensatory Programs (Cat. IV), those activities designed to aid pupils in overcoming academic deficiencies created by socio-economic and cultural factors. Many of these programs are funded under Title I grants. Because not all school district will have all the possible types of programs

the following subprograms are provided to be used where appropriate:

A. Pre-School (2200)

1. Comprehensive Planning (2201)
2. Program Development (2202)
3. Program Dissemination (2203)
4. Evaluation Activities (2204)

B. Early Elementary (2400)

1. Comprehensive Planning (2401)
2. Program Development (2402)
3. Program Dissemination (2403)
4. Evaluation Activities (2404)

C. Later Elementary (2600)

1. Comprehensive Planning (2601)
2. Program Development (2602)
3. Program Dissemination (2603)
4. Evaluation Activities (2604)

D. Secondary (2800)

1. Comprehensive Planning (2801)
2. Program Development (2802)
3. Program Dissemination (2803)
4. Evaluation Activities (2804)

PROGRAM 12 - Guidance (4401), that part of the pupil personnel service activities designed to assist and advise the pupil in making decisions related to his academic and vocational activities. The activities of the guidance counselors are included in this program. All testing, counseling seminars, course work, etc., designed to aid the pupil in his adaptation to the academic, social, and vocational world are included in this program.

PROGRAM 13 - Health Services (4402), that part of the pupil personnel services activities which are designed to provide for and protect the physical health of the pupil population. This includes all diagnosis, treatment, and referrals by the school nurse, the school doctor, and the school dentist.

PROGRAM 14 - Inservice Training (0303), those activities which are part of manpower management which includes school operated programs designed to improve the competence of the faculty and other professional staff. These activities are normally the responsibilities of administrative staff and instructional specialists. This program does not include reimbursement for faculty attendance in graduate school, seminars, and professional meetings unless such attendance is a substitute for the school operated inservice program.

PROGRAM 15 - Legal Services (0203), those activities under Immediate Staff Services engaged in by the school solicitor. Because this is usually a contracted service it will appear in the budget as a non-salary cost and there is no manpower type associated with the program.

PROGRAM 16 - Psychological Services (4403), that part of the pupil personnel services activities which includes all diagnosis, treatment, and referrals by the school psychologist.

PROGRAM 17 - Boards and Commissions (0103), that part of the Executive Director activities undertaken by the local Board of Education. The only salaried manpower type will be clerical personnel which will include the Board Secretary. All expenses incurred by the board for its operation will be included in this program.

PROGRAM 18 - PPBS (0104), that part of the Executive Direction activities concerned with the preparation and implementation of the Planning-Programming Budgeting System. The manpower types utilized may be professional administration, administrative staff, and/or clerical personnel. Where the manpower type such as research director (classified as administrative staff)

is responsible for other programs, the salary must be pro-rated over the appropriate programs.

PROGRAM 19 - Pupil Transportation (4605), that part of the administration and facility supporting activities directed toward the transportation of the pupils to and from the home and school. Bus drivers is the manpower type associated with this program.

PROGRAM 20- Food Services (4606),that part of the administrative and facilities support activities which deals with the procurement, preparation and distribution of foods to the pupils as part of the school lunch program.

PROGRAM 21 - Maintenance (0603), that part of the Office Support Service activities concerned with the operation and repair of the physical facilities and property of the school district. Maintenance personnel is the manpower type associated with this program.

PROGRAM 22 - Employee Benefits (4603), those expenses incurred by the school district which include contribution to retirement, social security, workmans compensation, health insurance, etc.; this program does not require any manpower type since it is usually a non-salary fixed expense. It is recommended that this program not be used unless needed;the costs should be pro-rated over the other programs.

PROGRAM 23 - Information Systems Design and Operation (0402), that part of the information management activities which is concerned with the operation development, and maintenance of school data systems. Included in this program are activities and expenses incurred for data processing and computer operation. The personnel involved in this program would normally be administrative staff such as a research director or systems analyst. Also, clerical personnel may be involved even to the extent of being the only

manpower type when these services are contracted from a regional data processing or commercial agency.

The programs defined in this chapter represent the structure around which the overall planning and programming activities of the PPBS are conducted.

The next chapter describes programming in the PPBS and is followed by a chapter on planning.

CHAPTER THREE

PROGRAMMING IN THE PPBS

Theoretically, in programming, planned goals are related to alternative programs; inputs of the system are related to outputs by lines of action through the manpower, materials, and facilities needed to support a program. As a practical matter, education and other government agencies dealing with human change are hard pressed to discover or develop output measures which are meaningful and can be directly related to inputs through individual program and program activities. This lack of outputs creates severe problems in programming in a Planning-Programming-Budgeting System.

A practical limited approach to these problems in the Local School District PPBS is to work with an organic model of the system. Conceptualizing the school system as an organization, the administrator can then become concerned with its overall health and the effects that various factors including program activities and projects will have on its health. To make judgements of the health of the system the administrator must have measures of variables which indicate health much as a physician uses blood pressure, heart rate, temperature, etc. to judge the relative condition of his patients and to determine when some action is necessary.

With this model in mind the developers of the PPBS have designed the following indicators to be used by the policy makers to judge the relative health of the school system and to determine the possible effects of various projects on this health:

Indicator #1 - Excess Enrollment - Defined as total average daily membership in the district minus the total classroom capacity.

Indicator #2 - Classroom Teachers per 1000 Weighted Pupils - Defined as total number of classroom teachers in the district divided by the total weighted enrollment, times 1,000.

Indicator #3 - Mean Cumulative Course Offerings (Grades 7-12) - Defined as total number of courses for grades 7 through 12 of 200 minutes per week.

Indicator #4 - Professional Instructional Specialists per 1000 Weighted Pupils - Defined as total number of instructional specialists in the district divided by the total weighted enrollment, times 1,000.

Indicator #5 = Total Dollar Expenditures for Curriculum Materials, Supplies, and Library Books per Weighted Pupil - Defined as the total dollars allocated in the current budget for curriculum materials, supplies, and library books divided by the total weighted enrollment.

Indicator #6 - Net Total Expenditures Per Weighted Pupil - Defined as the net total expenditures divided by the total weighted enrollment.

Indicator #7 - Professional Staff Turnover Rate in Percent Per Year - Defined as number of professional staff separations for a given school year, divided by total professional staff budgeted for that year. Multiply the resulting quotient by 100.

Indicator #8 - Percent of Professional Staff with Masters Degree or More - Defined as the number of professional staff at the beginning of a given school year with at least a masters degree, divided by total professional staff budgeted for that year. Multiply the resulting quotient by 100.

Indicator #9 - Percent Graduating Class Attending Post High School Education - Defined as the number of previous year's graduating class

attending some form of post high school education full or part time, divided by total number in previous year's graduating class. Multiply the resulting quotient by 100.

Indicator #10 - Drop-Out Percent for Grades 10-12 - Defined as total number of pupils who would have been in 10, 11, and 12 grades during the current school year but are classified on your school records as "withdrew-drop-out" as of the beginning of the current school year, divided by the total enrollment in grades 10, 11, and 12 at the beginning of the current school year. Multiply the resulting quotient by 100.

Indicator #11 - Language Achievement - Deviation from Grade Level - Defined as the mean score on the language portions of achievement test administered to grades 3, 6, 9, and 12, or other grades close to these levels, converted to "months behind or ahead of grade level" for each grade, based on test norms for that grade.

Indicator #12 - Mathematics Achievement - Deviation from Grade Level - Defined in the same manner as Indicator #11, except scores of mathematics portions of the achievement tests are used.

The indicators can be applied in at least three ways: (1) to determine the current and projected condition of the school system, (2) to set priorities for change in the system, and (3) to assess the desirability of alternate programs by determining the ability of each alternate to close indicator gaps. Indicator gaps are defined as the difference between the desired level of of the indicators and the actual level. All three of these uses are related.

The first use, to detemine the condition of the school system, must be applied to see the effects of the current programs, projected programs, and projects; this can be used as a gross evaluation of the school activities.

After the current and projected condition of the system is evaluated the policy makers can, if desired, select which of the indicators need be changed, i.e., set priorities; this is parallel to the activities of the physician who recommends treatment to alter blood pressure, pulse rate, etc. When the priorities have been set the policy makers may want to set desired levels of each or all the indicators as a physician may want to set a desirable blood pressure level for a patient. The desirability of a program change or project can then be judged on the basis of how effective it is in bringing the indicator level in line with the desired level, i.e., close the indicator gaps.

It should be obvious from the above discussion that programming in this PPBS is limited to gross estimates of program and input effects on the vitality of school systems.

This gross programming has both disadvantages and advantages. The most apparent disadvantage is the inability to relate specific outputs to specific programs or inputs and document the relationships. Another disadvantage is inherent in the indicators themselves; although they are the result of much study and an exhaustive review of the literature some of the more recent research questions their relationship to educational quality. It would serve no purpose to detail the arguments for and against these indicators here; however, it should be noted that the use of the indicators as measures of the health of a system represents a practical solution to a very complex theoretical problem.

The advantages of this programming technique are summed up in its generality and flexability. Fr m a theoretical view, its flexability is

important; the indicators can be changed and replaced as the needs of the system and the findings of research demand or suggest. Also, the policy making officials need only be concerned with those indicators of interest and ignore the rest; the administrator can and should set priorities.

The system's generality is perhaps its greatest strength. All school districts should be able to use the indicators to provide information to the high level administrators and policy making officials about the system's condition. More important, each school district can develop their own output measures for their own subprograms and activities; these indicators or measures will have unique meaning to each district. It is recommended that each user develop his own output measures which have meaning for him. This can be done in conjunction with subprogram definition and accounting system development. Following is a illustration of how this may be done.

In the program structure described above there is a secondary instruction program with a Pennsylvania Department of Education number (1400). School A may wish to divide this program into the following "tract" subprograms such as:

1. College Preparation
2. General Education
3. Business Education

School B may wish to divide this program into "field of study" subprograms such as:

1. Social Studies
2. Mathematics
3. Science
4. Communication Skills

In an internal accounting system numbers would have to be assigned to the subprogram to account for costs. These subprograms could be further subdivided into activities as the needs and capabilities of the district dictate. There is a companion accounting system to this PPBS which permits the user to do this kind of cost accounting.

After schools A and B have defined their subprograms and provided for cost accounting they can then develop output measures which are related to these subprograms and are meaningful to them.

School A may want to use things like, (1) Percent of College Preparation Graduates Attending College, (2) Percent Business Education Graduates Working in Offices and/or Attending Business School, (3) Percent of Internal Drop-outs, i.e., percent students who switch tracts, (4) Scores on College Boards of College Prep Students. Note these do relate to the subprograms of School A.

School B may wish to develop indicators like: (1) Scores on standardized tests referenced to local or national norms, (2) number of students winning prizes in science fairs, essay contests, etc., (3) variety of courses offered by department, and (4) number of students choosing elective courses in each department. Note these also relate to the subprograms of the school.

This type of activity should eventually be undertaken for each of the programs in the PPBS. The indicators suggested above are presented as illustrations only. The strength of the system lies in the philosophy that each school district should refine their subprograms to have local meaning; also they should define output measures (indicators) which have local meaning. With this model to follow, the local district can eventually develop an educational accountability system which is related to its programs, costs and inputs, but most important, a system which is locally meaningful.

CHAPTER FOUR

PLANNING IN THE PPBS

Background

The PPBS initially developed for the IUPS uses a planning method which centers on four cases: (1) Base Case, (2) Adjusted Base Case, (3) Final Base Case, and (4) Alternate Case. In its simplest form the method of planning consists of describing the current state of the system, then forecasting the effects various external factors and/or policy decisions will have on it. Each of the cases presents the current state of the system with respect to two condition variables; (1) costs reflected in the program budget and (2) "health" as shown by a series of variables termed "indicators". The effects of decisions and external factors on the costs and health of the system are projected in each case over a five year period; for each of the cases the effects of a different factor or combination of factors is projected. The factors whose effects are projected are inflation, enrollment changes, and program changes. Program changes are treated as operations or capital improvement projects. The inflation percent is estimated by the user. The enrollment changes must be forecast prior to implementation of the automated version.

The Base Case projects the effects of inflation on the current program costs and indicators. The Adjusted Base Case projects the effects of inflation combined with the forecast enrollment changes. The Final Base Case projects the combined effects of inflation, enrollment changes, and approved capital improvement and operations projects. The Alternate Case projects the

combined effects of inflation, enrollment changes, approved projects, and projects being considered for approval. Several alternate cases may be computed at the option of the user.

Essentially, the PPBS computes a Base Case which provides the user with a description of what may happen to the system's cost and "health" if no internal changes were made in the next five years. The Adjusted Base Case is then calculated which provides a description of what may happen to the costs and health if the only internal change in the system over the next five years is pupil enrollment. The Adjusted Base Case is followed by the Final Base Case which provides a description of the effects of already approved projects combined with inflationary and enrollment changes. This is followed by one or more Alternate Cases which describes what will happen if selected projects or project sets are adopted. The decision makers can use this information to plan alternate courses of action. For a more detailed description of the original planning concepts the reader is referred to the procedures manuals for Version 2 Model 1 of the PPBS.

When the existing system was modified to make it compatable with the Pennsylvania State PPB System an attempt was made to preserve as much of the basic planning system as possible. Although it was realized that complete preservation was unrealistic, the concept of looking at current conditions and comparing them to probable changes due to anticipated program changes had to be preserved, if the modified system was to be more than simply a projected program budget. The ability to compare alternate courses of action had to be maintained.

Modification of the planning concepts was influenced by the changes in

the program structure which was the first component of the system altered. Because the element level was the major building block of the State PPB System the new program structure for the local school district was designed to coincide, where possible, with the elements of the State PPBS. For the instructional programs this was not practical. The difficulty was resolved by using the projects in the Final Base Case as subprograms which will be used to define the elements under these programs. This change in the Final Base Case required modification of the planning concepts which is described below.

THE MODIFIED SYSTEM

Basic Program Cost

The Basic Case has been re-named Basic Program Costs. These Basic Program Costs include all the costs of the twenty three programs less the subprogram (elements) under the instructional costs. These costs are projected using the inflation percent which is input into the system. From this basic program cost portion of the system, the user can see the costs of programs and indicator values less the instructional supportive programs such as faculty development, program development, and instructional research.

Adjusted Program Costs

The Adjusted Base Case has been tentatively re-named Adjusted Program Costs. The Adjusted Program Costs are the same as those in the Basic Program Costs, except they are projected taking into account the effects of inflation combined with forecast enrollment changes.

Total Program Costs

The Final Base Case has been tentatively re-named Total Program Costs.

These total program costs include the basic cost described above plus the costs of the subprograms (elements) which are appropriate for the program and districts. The subprogram (element) costs are presented separately as well as combined with the basic program cost. All the program and subprogram costs are projected taking into account the effects of both inflation and enrollment changes.

Alternate Case

The Alternate Case has been retained except it is now necessary to include the cost of all projects, both those approved and those being considered. The total costs plus the costs of projects are displayed and projected in the semi-automated version. This Alternate Case will provide the user with an opportunity to view and consider each project separately as well as in selected sets to see their influence on the current budget and the probable influence on the budgets for the next five years.

It is felt that these changes do not in any way seriously impair the utility of the PPBS planning component. By maintaining the Alternate Case it is still possible for the administrator to compare alternate projects and their probable influence on the program costs and " indicators". The application of the above information to the budgeting cycle is illustrated in Figure A.

THE BUDGETING CYCLE

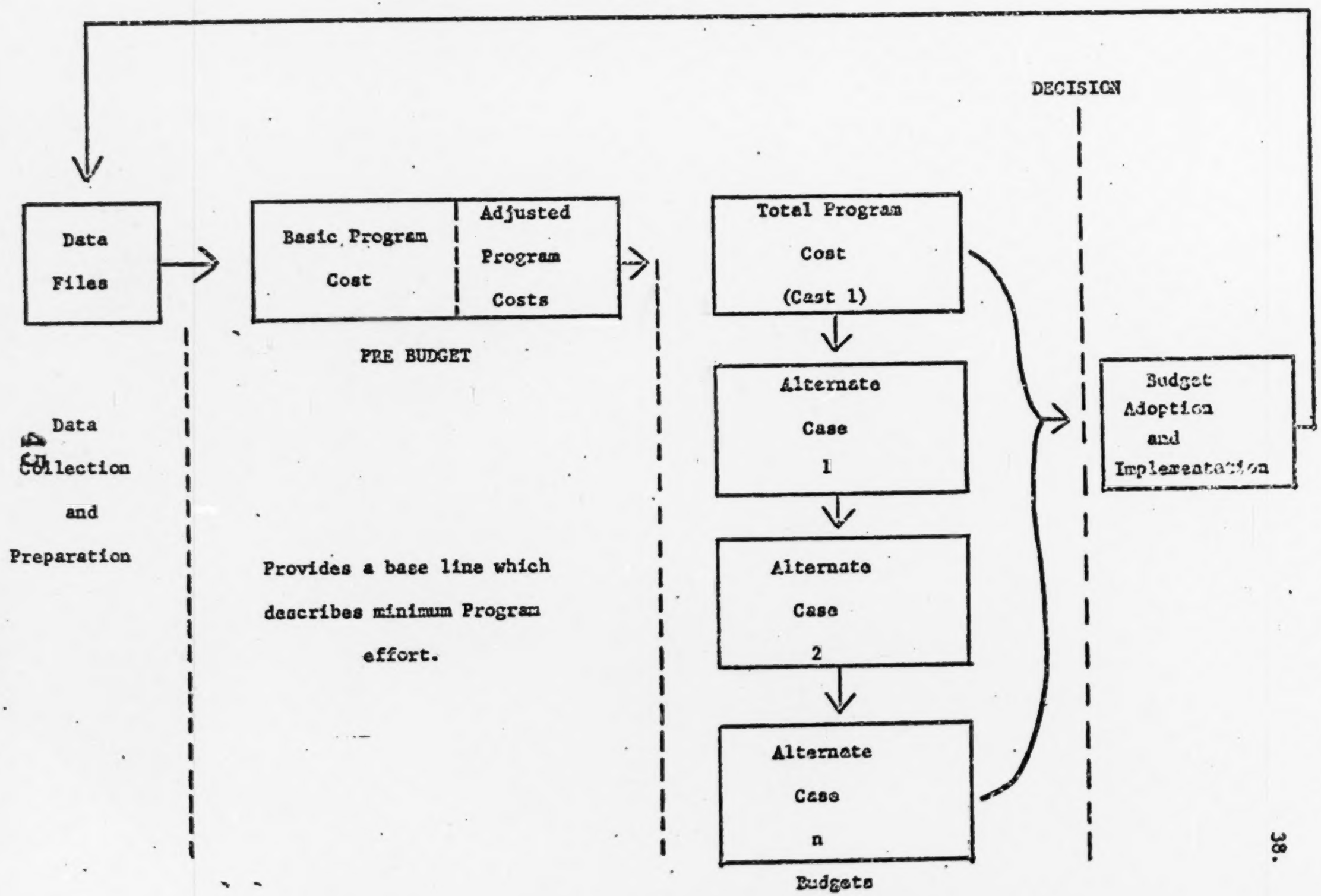
The data collection and preparation phase is the first step. The cycle starts with the data files which contain information on indicators, costs of programs and subprograms, inflation data, enrollment costs, and other supportive data. The data which are collected and prepared from the files represent input to the rest of the system.

This data is used to immediately produce the Basic Program Costs and Adjusted Program Costs which can be called the pre-budgets. These pre-budgets provide a base line which describes the minimum program effort. Minimum effort is evident in the instructional programs; e.g., the early childhood, elementary, and secondary instructional programs do not include costs for extra-curricular activities, instructional research, program development, faculty development, instructional media, innovative programs, or school evaluation and program review. The Vocational-Technical, and Special Education programs include inly the payments to outside agencies such as the area vocational technical school and Intermediate Units; the compensatory instructinn program would have minimum costs not assigned to any of the subprograms under it. These pre-budgets or skelton budgets, give the administrator the information necessary to evaluate the current budget in light of minimum program effort.

Production of the Total Program Costs, which is the complete current program costs, is the next step in the budget cycle. These total program costs include the basic program costs plus the costs of the subprograms (elements). Also, included are the manpower requirements, revenue forecasts and indicator levels. The Total Program Costs represents the first program budget which is acceptable. It is acceptable because it shows the complete current year allocation by programs and accounts for all the current year expenditures and revenues, and includes the costs of decisions made the previous year.

After the Total Program Costs, Alternate Cases are computed. As many alternate cases can be computed as desired. For each alternate case, program and project costs are computed as well as indicator levels and revenue

Figure A. - Budgeting Cycle (Decision Cycle)



feasibility. By comparing the various Alternate Cases with each other and with the Total Program Costs, a decision is made to adopt and implement one of the budgets. The implementation provides data for the files which begins the cycle for the next budget period. A summary of this cycle appears in Figure B.

RELATIONSHIP TO THE STATE PPBS

The use of the Total Program Costs described above is similar to the use of the Agency Program Plan (APP) described by Mowitz in Chapter IV of the Design and Implementation of Pennsylvania's Planning, Programming, Budgeting System. On page 22 he states, "By restricting projections to current commitments, it was possible to establish a present and future year level of program commitments - in impact and output terms, financial terms, and manpower terms, the APP documentation - which would form the baseline for future program decision". A parallel statement can be made for the Total Program Costs of the IUPS-PPBS: the Total Program Costs restricts the projections to current commitments which makes it possible to establish a present and future year level of program commitments - in indicator levels and gaps, financial terms, and manpower terms - which forms a baseline for future program decisions.

The Alternate Cases serve roughly the same function as the Program Revision Request (PRR) described by Mowitz. The alternate case is a formal way to study the effect of proposed program changes (projects) on individual programs and the total budget, so that the school officials can make informed decisions, just as, "The program revision request process,... is the formal means by which changes in the agency programs plan and Commonwealth

FIGURE B

COMPONENTS OF BUDGETING CYCLE

PROGRAM COSTS

INPUTS	BASIC COSTS	ADJUSTED COSTS	TOTAL PROGRAM COST	ALTERNATE CASE 1
1. Indicator data 2. Program Costs a. Element Costs b. Project Costs 3. Enrollment forecasts 4. Inflation percents 5. Other supportative data (Manpower, etc.)	1. Program Costs Inflated over 5 years (does not include cost of elements) 2. Indicators projected 3. Manpower needs.	1. Program costs projected using inflation and enrollments (does not include costs of elements) 2. Indicators projected 3. Manpower needs	1. Program costs plus element costs projected over 5 years 2. Indicators projected and indicator gaps (optional) 3. Manpower needs 4. Revenue Forecasts	1. Total program costs plus projects 2. Projected indicators plus gaps (optional) 3. Manpower needs 4. Revenue feasibility

Data Collection

PRE-BUDGETS

Minimum Program Effort

Current Budget

Includes last years decisions

Alternate Budget 1

Alternate Budget 2

Alternate Case n

Alternate Budget n+1

program plan are introduced." (page 27).

There is no claim that the State's PPBS and the one developed by the IUPS are the same. It would be unfortunate if both systems were identical because the needs and the organizational structure of the Department of Education and the Local School Districts are diverse enough that any one system could work for one or the other or neither organization, but not for both. It is maintained, however, the systems are conceptually and philosophically compatable..Both systems start with the assumption that it would not be feasible to look at the total system each year as if starting from zero; both systems make provision to study the effects of proposed changes - the State with Program Revision Requests and the IUPS with projects in the Alternate Cases.

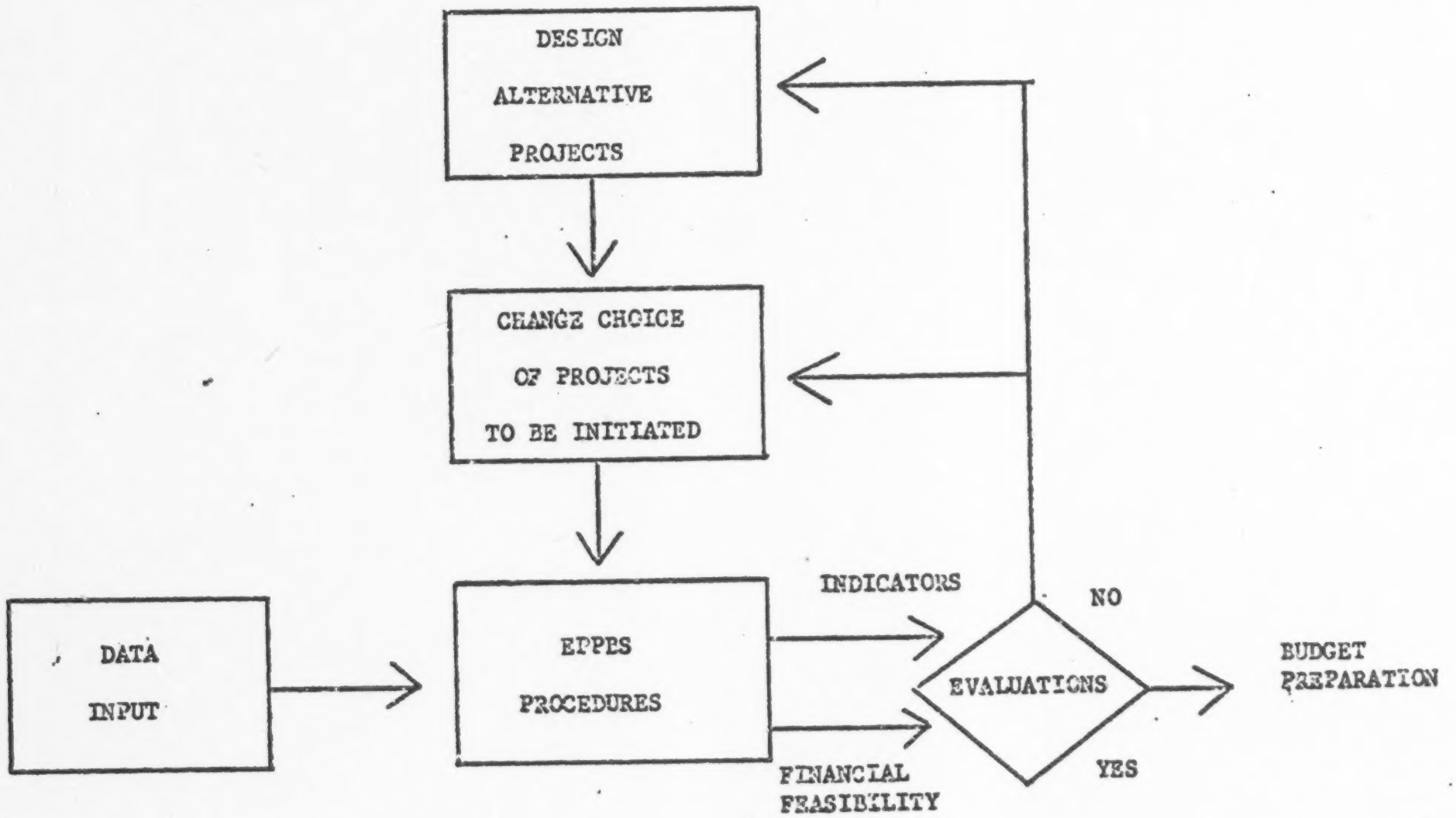
The modifications described above do not change the basic flow of the original PPBS as described by the Government Studies Center in the Final Technical Report on the Intermediate Unit Planning Study. A description of this flow is presented below.

THE BASIC FLOW IN THE PPB SYSTEM

Figure C illustrates the basic process by which decision-makers choose the preferred course of action. Data are prepared about the present status of the school district and the community. Included in the data preparation are estimates of the revenue factors, such as property market value and subsidy levels. From the previous year's planning, information is collected about the current policies, programs, and projects under way in the school district. All of these data are then fed into the basic procedures which provide two kinds of output: (1) estimates of indicator levels under a

FIGURE C.

Basic Process of Choosing Preferred Course of Action



proposed plan of operation and (2) estimates of the revenue required to operate the plan. These outputs are evaluated by the decision-makers.

If the evaluation shows the plan to be satisfactory it can be adopted and a detailed budget prepared. If the plan is not satisfactory, then the decision-makers can try different combinations of activities already designed or they can call for the design of new projects and add them into the plan. Basically, PPBS is a forecasting tool which lets decision-makers see the probable consequences of plans of operation in terms of indicators (which show the benefits and effects derived) and financial factors (which measure the costs).

Figure D shows the basic PPB System flow in more detail. There are two kinds of input data; (1) forecasts and (2) status data. Forecasts are made of anticipated revenues and enrollment levels by grade.

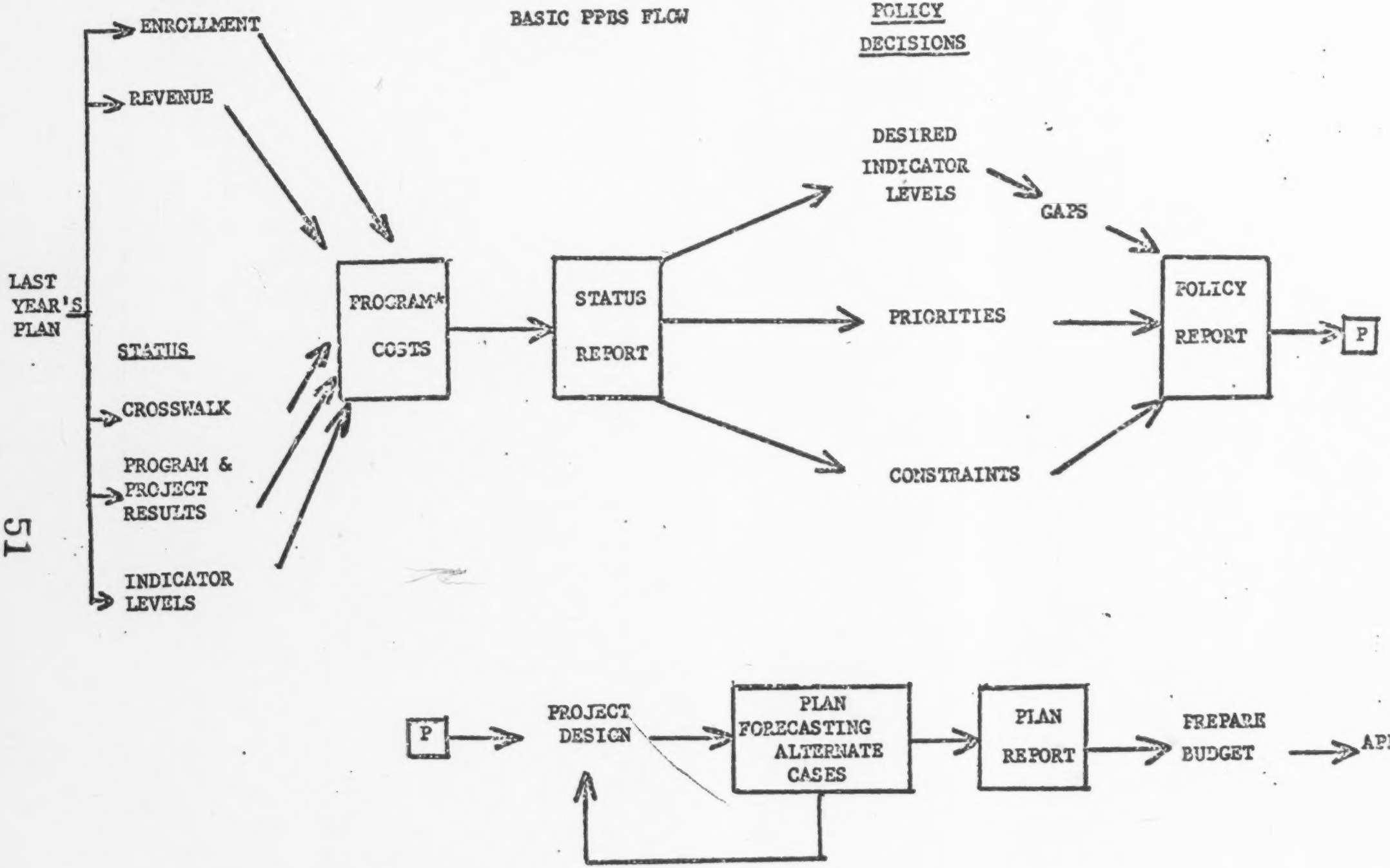
The status of the school district is determined principally by an analysis of the past year's operation. An analysis of the expenditures is performed. These expenditures will have been collected by the normal accounting procedure and recorded by expenditure category. In order to facilitate planning it is desirable to aggregate costs by programs and projects. A program or project is simply a classification of activities which is useful to the decision-makers in planning. To convert the expenditure categories into the program and project classifications a crosswalk is used if a program accounting system has not been fully implemented. An analysis of the evaluations of the results of last year's programs and projects and an examination of present indicator levels is also undertaken. Data for the status report are derived from financial and other

FORECASTS

FIGURE D

BASIC PPBS FLOW

POLICY DECISIONS



* Includes - 1. Basic Program Costs
2. Adjusted Program Costs
3. Total Program Costs

operational reports and from achievement and performance tests administered to the pupils.

These data and information are then used to produce the program costs i.e., Basic Program Costs, Adjusted Program Costs, and Total Program Costs. These program costs include a projection of indicator levels, costs, manpower requirements, and a determination of financial feasibility under the assumption that no new planning decisions will be made for the next five year period.

The output of the program cost (Total Costs) computations, provide a baseline of the operations of the school district. Additions to and subtractions from this baseline will be made for the purpose of examining various alternatives for improving the operation of the school district. The data in program cost computations, along with the relevant environmental data and information are interpreted to the board by means of the Status Report.

At this point the board and superintendent define the objectives of the school district. Specifically, they determine what new problems face the school district and what new objectives and indicators should be established. The decision-makers set desired levels for all indicators -- levels which they would like to attain in the next five years; this defines the indicator gaps.

They then set priorities in terms of these gaps, i.e., which are the most important to close. Also at this time the board and superintendent establish certain constraints within which improvements must be made. For example, they might limit the rate at which building construction can proceed.

All of these decisions are reflected in the Policy Report.

Next, members of the school district staff are given the task of designing projects which will help attain some of the objectives, i.e., close the indicator gaps.

At this point the distinction between programs and projects can be clarified. In the PPB System the school district is viewed as having two kinds of activities for convenience in planning. One kind is called a program, such as elementary education or health services which are sets of continuing activities which have long been established and which will continue unless some specific actions are taken to reduce or change them. It is assumed that, except as noted below, they are continuous. New activities are called <u>projects</u> which may become continuous and, hence, become additional programs or they may be of limited duration; they may be innovative or traditional. A set of activities is singled out as a project primarily because management wishes to keep track of its costs, operational progress, and its influence on indicators and/or programs. Thus, most improvements in the school district that are designed to close the indicator gaps are brought about by designing specific projects which may be remedial projects, in-service projects, or business support projects.

After the projects have been designed, the process of selection begins. The system now enters the planning stage. The same kind of computational procedures used for the program costs are repeated except that new projects in various combinations are added. Some of the projects might have negative quantities so that these cause reductions in existing programs or in previously approved projects. A combination of projects is called a <u>project</u>

set. A project set combined with the existing programs forms a plan. The impact of this plan over the five-year period is forecast to give estimates of indicator levels, expenditure and manpower requirements.

The financial feasibility of the plan is examined in terms of the anticipated revenues. Thus, a number of plans are produced and examined. From these plans a preferred plan is chosen -- the one which is financially feasible and which increases the high priority indicators as much as possible. This plan is described in the Plan Report. From this information the annual budget is prepared for approval.

The next chapter presents a detailed description of some of the computational procedures of the PPBS which is illustrated by the computer printout that appears in Appendix B.

SECTION II

CHAPTER FIVE

DESCRIPTION OF THE COMPUTATIONAL PROCEDURES USED IN THE SEMI-AUTOMATED VERSION OF THE PPBS

The simulated school district printout discussed in this section is based on actual data from one of the pilot school districts that participated in the field testing of the Educational-Planning-Programming-Budgeting System during the 1968-69 school year. Because all the characteristics of the system were not simulated, part of the discussion and printout is from the original pilot districts. The report of the simulation study is presented in Appendix C, the printout appears in Appendix B.

ENROLLMENT FORECAST

The current year (CY) to year five (Y5) enrollment for each of the six enrollment types is entered. It is assumed that the enrollments are non-overlapping, i.e., no Vocational-Technical pupils are contained in the Grades 7-12 enrollment.

Total Enrollment is the sum of the six enrollment types (Kindergarten, Grades 1-6, Grades 7-12, Vocational-Technical, Special Education 1-6, and Special Education 7-12). Average Daily Membership is the result of multiplying the Attendance Percent times the sum of all six enrollment types, except Kindergarten, which is weighted at .5 if it is single session.

Weighted Enrollment-Staff and Weighted Enrollment-Finance are the result of taking the weighted sum over the six enrollment types using the weights shown. If Kindergarten was double-session, the staff and finance weights for Kindergarten pupils would be 1.0 instead of .5 for single session. If the

Vocational-Technical Program is conducted within the school district, the Vocational-Technical pupil weights would be the same as Grades 7-12. If the Vocational-Technical Program is conducted outside the school district, the pupil weights are as shown.

The Weighted Enrollment-Instructional Subsidy is the weighted sum of the six enrollment types using the weights shown. The Weighted Average Daily Membership is the result of multiplying the Attendance Percent times the Weighted Enrollment-Instructional Subsidy.

Basic Program Costs, Non-Salary Costs Held Constant

The non-salary costs to be held constant in the Basic Program Cost Projection are entered.

BASIC PROGRAM COSTS

The current year (CY) salary, CY non-salary, and CY-Y5 capital outlay costs by program are entered. CY-Y5 debt service is also entered - if the option to treat debt service separately is used. For this simulation debt service was pro-rated over the programs. The year one (Y1) to year five (Y5) salary and non-salary costs are obtained through inflation on the CY costs, except where part of the non-salary cost is to be held constant. Separate inflation rates are used for salary and non-salary costs.

Inflating the total salary cost assumes that manpower is held constant over time and the salary per man is inflated. Inflating the total non-salary cost assumes that enrollment is held constant over time and the non-salary cost per pupil is inflated.

Base Program Cost Manpower

CY manpower is entered. For the basic program costs manpower is held

constant over time. Hiring takes place only because of turnover, The turnover rate for teachers is shown as Professional Staff Turnover, in percent.

Basic Program Cost, Indicators

Five indicators are calculated and seven are entered. All entered indicator values are actually Total Program Cost values. Excess enrollment is the difference between the Average Daily Membership and the standard of twenty-five pupils per classroom.

Weighted Enrollment-Staff is used to calculate Teachers per 1000 Weighted Pupils and Instructional Specialists, Nurses, and Psychologists per 1000 Weighted Pupils.

Weighted Enrollment-Finance is used to calculate Expenditures for Materials, Supplies, and Library Books per Weighted Pupil and Net Expenditures per Weighted Pupil. If the Vocational-Technical Program is conducted outside the school district, the non-salary cost for the Vocational-Technical Program is regarded as a tuition payment and is deducted from the total cost before calculating Net Expenditures per Weighted Pupil.

For Secondary Course Offerings, Professional Staff Turnover, Professional Staff with MA Degree or More, Percent of Graduating Class Attending Post High School Education, Dropouts as a Percentage of Enrollment, Language Achievement, and Mathematics Achievement, the CY-Y5 indicator levels are entered.

The CY expenditures for curriculum materials, supplies, and library books is entered, and Y1-Y5 expenditures are calculated in the Basic Costs by inflating the CY expenditure.

Basic Costs Indicator Gaps (Not used in simulation)

CY-Y5 desired indicator levels can be entered for each of the twelve indicators. The indicator levels will be subtracted from the desired indicator levels to obtain the indicator gaps, which will be printed in the format shown in the appendix. This table was taken from Educational Planning-Programming-Budgeting System Procedures Manual for School Districts, Version 2, Model I which describes the basic system from which this modification was taken.

ADJUSTED COSTS SUBSIDIARY DATA

The pupil-teacher ratios for each instructional program are calculated as follows:

1. Early Childhood Instruction: Weighted CY Kindergarten enrollment is divided by CY Early Childhood Teachers.
2. Elementary Instruction: CY Grades 1-6 enrollment is divided by CY Elementary teachers.
3. Secondary Instruction: CY Grades 7-12 enrollment plus weighted CY Vocational-Technical enrollment is divided by CY Secondary Teachers. The weight for the Vocational-Technical pupils is .5 under the assumption that they spend ½ time in Secondary Instruction.
4. Vocational-Technical Instruction: The Vocational-Technical Program is conducted outside the school district. The pupil-teacher ratio does not apply.
5. Special Instruction: Weighted CY Special Education enrollment Grades 1-6 plus weighted CY Special Education enrollment Grades 7-12 is divided by CY Special Education Teachers. The weights are 1.0 and 1.1 respectively.

For Y1-Y5, the number of teaching positions for teachers corresponding to these programs is calculated to maintain the CY pupil-teacher ratios under rising and falling enrollment.

The CY Mean Salary per Teacher in the school district is calculated as the ratio of the corresponding program CY salary cost and CY teaching positions. The Y1-Y5 mean salaries are calculated by inflating the CY mean salary.

Three options for calculating teachers salaries are provided in PPBS, Version II, Model 1 and can be used for each program. Even though Option #3 shows more money than the other two options, this situation will vary; because, depending on what numbers are used, Option #3 may yield smaller salary amounts than Option #1. However, Option #3 will always yield larger amounts than Option #2. Each Example utilizes the following data: (1) CY teaching staff for a given program is 100; (2) turnover rate is 10 percent; (3) 30 new teachers must be hired for Y1 (10 replacements and 20 new positions); (4) mean salary for CY is $10,000, (5) mean leaving salary is $8,000 (end of CY); (6) mean starting salary is $7,000 (beginning of CY); (7) compound inflation rate for CY mean salary is five percent; and (8) compound inflation rate for CY starting salary is three percent.

Option #1- Teachers who enter and teachers who leave the payroll of the school district will be assumed to have the same salary as the mean salary of teachers currently employed.

Option #2- A CY salary per entering teacher is entered. An inflation rate, different from the rate used for salaries so far, is used to obtain the Y1-Y5 salary per entering teacher. Once the teacher has joined the school district, his salary is inflated at the rate used for the mean salary per teacher in the school district at CY. The turnover rate is assumed to

apply to both teachers employed in the CY and teachers who enter during Y1-Y5. Teachers who leave during Y1-Y5 will have been paid either the mean salary appropriate to CY teachers or the salary appropriate to the year entered.

Option #3 - In addition to the assumptions included under Option #2 several additional assumptions are included under this option. A mean salary per departing teacher for those employed in the CY may be entered besides the mean CY salary per entering teacher. Those CY teachers who leave during Y1-Y5 will be paid the mean salary per departing teacher for the previous year.

If the Vocational-Technical Program is conducted inside the school district, then the above discussion of salaries per teacher would apply also to Vocational-Technical teachers.

The CY non-salary costs per pupil are calculated using the same pupil populations as discussed for the pupil-teacher ratios above. The weights for Special Education enrollment Grades 1-6 and Special Education enrollment Grades 7-12 are 1.0 and 1.25 respectively. The CY non-salary costs per pupil are inflated through Y5. If the Vocational-Technical Program is conducted outside the school district, the non-salary cost per pupil is regarded as tuition and may be inflated at a rate different from the other non-salary costs. The total non-salary cost for each program is obtained by multiplying the corresponding non-salary cost per pupil by the number of pupils.

For the Guidance Program, the CY non-salary cost per pupil is the ratio of its CY total non-salary cost and CY Weighted Enrollment-Finance. The non-salary cost per pupil is inflated through Y5. The Guidance Y1-Y5 total non-

salary cost is obtained by multiplying the non-salary cost per pupil by each year by the Weighted Enrollment-Finance for each year.

For both the Inservice Training and Legal Services, the CY salary cost per pupil is the ratio of the CY total salary cost and the CY Weighted Enrollment-Staff. The salary cost per pupil is inflated through Y5. The Y1-Y5 total salary costs are obtained by multiplying the salary cost per pupil for each year by the Weighted Enrollment-Staff for each year. The salary cost for these Programs is projected on a per pupil basis.

The non-salary cost for the Inservice Training and Legal Services is projected in the same manner as the Guidance Services non-salary cost.

The Adjusted Cost projections of the Pupil Transportation Program can be done in two ways. In the first way, riders are projected assuming a constant percentage of total enrollment. CY number of buses, seats per bus, and number of trips per day per bus are used to calculate the busing capacity. A bus is added only when the number of excess riders exceeds the mean capacity per bus. For each bus that is added, transportation personnel is hired. The CY salary per transportation personnel is calculated by dividing CY Personnel into CY Pupil Transportation salary cost. The salary per personnel is inflated through Y5. The Y1-Y5 Pupil Transportation salary cost is obtained by multiplying the salary per personnel for each year by the number of personnel for each year.

The CY non-salary cost per bus is the CY total Pupil Transportation non-salary cost divided by CY buses. The non-salary cost per bus is inflated through Y5. The Y1-Y5 total Pupil Transportation non-salary cost is obtained by multiplying the non-salary cost per bus for each year by the number of buses for each year. Y1-Y5 capital outlay per bus is entered. If a bus is

added in any year, a capital outlay is incurred in that year.

The second method of Pupil Transportation cost projections applies if the Pupil Transportation costs are a contractual expense. The projection occurs as follows. The Y1-Y5 riders are projected as discussed above. The CY non-salary cost per rider is calculated as the ratio of CY Pupil Transportation total non-salary cost and CY riders. The non-salary cost per rider is inflated through Y5. The Y1-Y5 Pupil Transportation total non-salary cost is obtained by multiplying the non-salary cost per rider for each year by the number of riders for each year.

Food Services non-salary cost is projected in the same manner as Guidance non-salary cost.

For the Employee Benefits Program, the ratio of employee benefits CY salary cost to CY total other salary (not including Inservice and Legal services salaries because they are contractual expenses) is calculated. The employee benefits salary cost for each year in Y1-Y5 is calculated using this ratio. In the simulation the employee benefits were pro-rated over the programs, however, it is the option of the user to place employee benefits in a separate program.

ADJUSTED COSTS PROGRAM COSTS

The programs whose costs may differ from the Basic Program Costs are: Early Childhood Instruction, Elementary Instruction, Secondary Instruction, Vocational-Technical Instruction, Special Instruction, Guidance, Inservice Training, Legal Services, Pupil Transportation, Food Services, and Employee Benefits. The basis for projecting the costs for these programs is the same as outlined in the discussion above.

Adjusted Cost Manpower

The manpower that may change from the Base Cost are Teachers-Early Childhood, Elementary, Secondary, Vocational-Technical, Special and Transportation Personnel. The calculation of personnel to be hired (hires) reflects turnover and position changes.

Adjusted Cost Indicators

The indicators that change from the Basic Cost are Teachers per 1000 Weighted Pupils; Materials, Supplies and Library Books per Weighted Pupil; and Net Expenditure per Weighted Pupil. Expenditures for curriculum materials, supplies, and library books are projected on the same basis as the non-salary cost in the Guidance Program. See the discussion of above for a description of how the projection is made. All entered indicator values are actual total cost values.

Adjusted Costs Indicator Gaps (Not used in the simulation)

CY-Y5 desired indicator levels are entered for each of the twelve indicators. The indicator levels are subtracted from the desired indicator levels to obtain the indicator gaps. In the simulation the indicator gaps were not calculated, however the capacity to do so exists. If the option to calculate the indicator gaps is chosen, they would be printed using the format referred to above.

TOTAL PROGRAM COSTS PROJECTS (SUBPROGRAMS)

The printout exhibits the manpower and cost consequences of four subprograms which correspond to elements in the Program Structure of the Pennsylvania Department of Education. It is at this point in the PPBS that the Local School District can complete the information on those subprograms

(elements) which were not obtainable in the previous sections. For each subprogram the manpower and costs are displayed according to the programs affected.

TOTAL PROGRAM COSTS

The programs whose costs differ from the Adjusted Costs are those programs affected by the four subprograms illustrated in the printout. If the option to treat employees benefits separately were used the employees benefits program would also change. In this simulation this was not done.

Total Program Costs, Manpower

The manpower positions that change from the Adjusted Costs are the manpower positions listed under the four subprograms. The calculation of Hires reflects turnover and position changes.

Total Program Costs, Indicators

The indicators that change from the Adjusted Base Case are Excess Enrollment; Teachers per 1000 Weighted Pupils; Instructional Specialists, Nurses, and Psychologists per 1000 Weighted Pupils; Materials, Supplies, and Library Books per Weighted Pupil; and Net Expenditures per Weighted Pupil. The subprogram classrooms are added to the Adjusted Cost classrooms.

Total Program Costs, Indicator Gaps

CY-Y5 desired indicator levels are entered for each of the twelve indicators. The indicator levels are subtracted from the desired indicator levels to obtain the indicator gaps. In this simulation they were not calculated but if the option were used they would be displayed as discussed above.

TOTAL PROGRAM COST - REVENUE FORECAST

Total Program Costs, Real Estate

Y1-Y5 District Real Property Market Value and Y1-Y5 Assessment Ratio are entered. Taxable Assessed Value is the product of District Real Property Market Value times the Assessment Ratio. Revenue per mill is Taxable Assessed Value divided by 1000. The CY Real Estate Tax Rate in mills is entered. Assessed Tax is the product of Revenue per mill times the CY Real Estate Tax Rate. The Collection Percent is entered. Gross Assessed Tax is the result of applying the Collection Percent to Assessed Tax. Y1-Y5 Adjustments, representing such things as penalties, discounts, exonerations, liens filed, etc., are entered. The Total Real Estate Tax at CY Rate results from applying the Adjustments to the Gross Assessed Tax.

Total Program Costs, Revenue Forecast

Y1-Y5 Total Other Revenue (revenue from Wage and Income Taxes, Per Capita Taxes, federally connected revenues, etc.), is entered. Total Other Revenue is added to Total Real Estate Tax at CY Rate and Net Instructional Subsidy to obtain Total Revenue at CY Real Estate Tax Rate.

Total Program Costs, Revenue Feasibility

Final Total Cost is subtracted from Total Revenue at CY Real Estate Tax Rate to obtain Surpluses and Deficits at the CY Real Estate Tax Rate. Surpluses at the end of any year are carried forward to the next year in calculating the next year's surplus or deficit.

The Y1-Y5 Real Estate Tax Rate in mills that are necessary to remove the deficits are calculated. Surpluses at the end of any year are carried forward to the next year in calculating the next year's Real Estate Tax Rate.

The Total Revenue at Y1-Y5 Real Estate Tax Rates is calculated and any surpluses that result from the Y1-Y5 tax rates are exhibited.

ALTERNATE BASE CASE

The following discussion of project alternatives and the Alternate Base Case is illustrated with a printout from the original pilot schools and not from simulation. This phase of the modified PPBS was not included in the simulation because the original procedures and techniques were not altered.

Operations Project Alternative 1

This portion of the printout exhibits the manpower and cost consequences of an Operations Project Alternative for Reading Improvement. The manpower and costs are displayed according to the programs affected. When the Operations Project Alternative is combined with the Total Program Costs in one or several alternative sets of operations and capital improvement project alternatives, employee benefits salary costs will also be incurred according to the ratio described in the discussion above.

The Y1-Y5 changes in the seven non-calculated indicators are entered. When the Operations Project Alternative is combined with the Total Program Costs in one or several alternative sets, these changes in indicator levels will be added to the Total Program Costs indicator levels. The other five indicators are calculated by the computer when the operations project alternative is combined with the Total Program Costs.

Capital Improvement Project Alternative 1

The printout exhibits the manpower and cost consequences of a Capital Improvement Project Alternative. The manpower and costs are displayed according to the programs affected. When the Capital Improvement Project

Alternative is combined with the Total Program Costs in one or several alternative sets of operations and capital improvement project alternatives, employee benefit salary costs will also be incurred according to the ratio described in the discussion above.

When the Capital Improvement Project Alternative is combined with the Total Program Costs, the Capital Improvement Project Alternative's classrooms are included in total classrooms for calculating Excess Enrollment. Also, the Capital Improvement Project Alternative's Additional Revenue is included in the Total Revenue at CY Real Estate Tax Rate.

The Y3-Y5 changes in the seven non-calculated indicators are entered. When the Capital Improvement Project Alternative is combined with the Total Program Costs, these changes in indicator levels will be added to the Total Program Costs indicator levels. The other five indicators are calculated by the computer when the Capital Improvement Project Alternative is combined with the Total Program Costs.

Alternative Case 1 (Includes Operations Project Alternative 1)

With one Operations Project Alternative and one Capital Improvement Project Alternative three possible alternative sets may be formed: (1) the Operations Project Alternative and not the Capital Improvement Project Alternative, (2) the Capital Improvement Project Alternative and not the Operations Project Alternative, and (3) both the Operations Project Alternative and the Capital Improvement Project Alternative. Only one alternative set is exhibited in this computer printout. The printout shows that the Alternative Set includes Operations Project Alternative 1.

Alternative Case 1 (Includes Capital Improvement Project Alternative 1)

The printout shows that the Alternative Set includes Capital Improvement Project Alternative 1.

Alternative Case 1, Program Costs

The program costs are the Total Program Costs plus the costs shown for the Operations Project Alternative and the Capital Improvement Project.alternative shown. Employee benefits salary costs are also incurred for the Operations Project Alternative and the Capital Improvement Project Alternative salary.

Alternative Case 1, Manpower

The manpower positions are the Total Program Costs manpower positions plus the manpower changes shown for the Operations Project Alternative and Capital Improvement Project Alternative. Hires reflect position changes and turnover.

Alternative Case 1, Indicators

The following indicators are calculated as discussed above: Excess Enrollment; Teachers per 1000 Weighted Pupils; Instructional Specialists, Nurses, and Psychologists per 1000 Weighted Pupils; Materials, Supplies, and Library Books per Weighted Pupil; and Net Expenditure per Weighted Pupil.

For Secondary Course Offerings, Professional Staff Turnover, Professional Staff with an MA or More, Percent of Graduating Class Attending Post High School Education, Dropouts as a Percentage of Enrollment, Language Achievement, and Mathematics Achievement, the indicator levels were derived by adding the changes in indicators of the Operations Project Alternative and the Capital Improvement Project Alternative to the Total Program Costs.

Classrooms are the Total Program Costs classrooms plus the classrooms of the Capital Improvement Project Alternative. Expenditures for materials, supplies, and library books are the Total Program Cost expenditures plus the expenditures for the materials, supplies, and library books of the Operation Project Alternative and the Capital Improvement Project Alternative.

Alternative Case 1, Indicator Gaps

CY-Y5 desired indicator levels are entered for each of the twelve indicators. The indicator levels are subtracted from the desired indicator levels to obtain the indicator gaps.

Alternative Case 1, Revenue Feasibility

The total Revenue at CY Real Estate Tax Rate is the Total Program Cost figures plus the Additional Revenue of the Capital Improvement Project Alternative. The calculations of the Y1-Y5 Real Estate Tax Rates and other data are made as explained above.

CHAPTER SIX

ALLOCATION OF COSTS TO PROGRAMS

Crosswalk

Planning is performed on the basis of programs and projects in PPBS. These are the categories by which various costs are accumulated. In most school districts, costs are accumulated according to expenditure categories, such as salaries and materials. The latter accounting procedure has been established because of fiduciary concerns, i.e., insuring that no unauthorized expenditures are made. The program and project categories are designed to facilitate planning and are not designed to aid in fiduciary control.

Therefore, it is necessary to translate the costs which have been accumulated by the normal accounting system into the program and project categories. This can be done in three ways:

1. It can be done on an ad hoc basis every time a particular program or expenditure is studied. This could be very time consuming.
2. The entire accounting system can be changed so that all expenditures are coded by program or project as well as by account number. This has been done as part of the PPBS development and is available to the user.
3. Use of a crosswalk to translate account costs into program and project costs at the start of the planning effort. It is the best compromise if one wishes to use the planning system quickly. However, it does require some subjective judgment, and, hence, there is room for error. It is recommended that crosswalk techniques can be used in the implementation of the PPBS until the accounting system is fully implemented.

Figure A shows a typical crosswalk. On the left are the standard expenditure accounts and the amount accumulated in each. Across the top are the various program categories. (Projects are not shown on the Figure). The problem is to allocate the expenditure account costs to the various programs. In some cases this can be done by means of a numerical procedure. For example, salaries can be fully allocated to various instructional programs according to the assigned position of each teacher or by proportion, i.e., computer personnel whose salary costs are prorated between Long Range Planning and PPBS. The latter procedure is, obviously, more difficult. Theoretically this latter procedure should be based on a careful accounting of the time which computer personnel spend in various activities. However, for the purposes of planning, estimates can be made according to the judgement of personnel familiar with the work schedules of the computer personnel.

Proration Techniques

Methods of proration are presented below. A more detailed discussion is found in the accounting manual for the PPBS.

There are numerous methods of prorating expenditures ranging from very simple to very complex methods. Proration methods of expenditures for public schools will generally be based on one or more of the following elements: (1) time; (2) average-daily-membership or average-daily-attendance; (3) time-floor-area; (4) hour-consumption; (5) number of pupils; (6) mileage; or (7) quantity consumed.

Although at least one of the seven methods of prorating expenditures mentioned above will usually be applicable to most expenditures, each type of expenditure must be examined for unusual conditions which would affect the proration method selected. In selecting a method of prorating expenditures there are three important factors which must be considered: (1)

Figure E

Crosswalk

Expenditure Accounts		Amount	Long Range Planning	E.C. Inst.	Elem. Inst.	Sec. Inst.	Spec. Inst.	P.P.B.S.
0211	Principals	329.	-	-	-	-	-	329.
02130	Teachers	5,318.	-	$234.	$2,334.	$2,617.	$133.	-
02131	Teachers Aid	26.	-	-	-	-	-	26.
01135	Computer Personnel	28.	$27.	-	-	-	-	1.
Program Totals			-	-	-	-	-	-

Crosswalk - a method of transferring amounts in budget accounts to program categories.

that the method have a direct relationship to the activity for which the expenditure is being prorated; (2) that the method be as simple and as accurate as conditions allow; and (3) that the method be feasible to apply. The first consideration mentioned is usually the most difficult of the three to evaluate. To illustrate, floor space has little, if any, direct bearing on the instructional supplies used in a classroom. The salary of the teacher in charge of the classroom may have a closer relationship to instructional supplies used, but this relationship is not a sound basis of proration. Floor space is a significant factor in determining the proration of custodial supplies.

Time, in most cases, constitutes an equitable basis for prorating salary expenditures. When an employee earns a salary at a standard rate, the length of time spent on an activity provides the basis for calculating the proration percentage. However, should the earnings rate vary depending on the activity engaged, the time factor must be combined with the varying rate factor to provide an equitable proration method.

For some activities, such as general administration salaries, the average daily membership or average daily attendance may be an alternate prorating method. This is based on the assumption that the more pupils in membership or in attendance for a given program area the greater is the portion of time devoted to the program area by the general administrative personnel. If this assumption can be proven inaccurate, then this method should be adjusted or a more appropriate method selected.

For activities such as janitorial and maintenance salaries, floor area may provide a more satisfactory basis of proration. This method would be an

alternate to the time method, assuming that due to local conditions, the time spent in servicing each different area is not easily obtainable.

The time method of prorating expenditures has little direct relationship to categories of expenditures other than salaries. In any case, the three necessary elements of proration, direct relationship accuracy, and feasibility must be carefully considered in selecting a prorating method.

In selecting methods of proration of expenditures between functional classifications, for example, Instruction accounts and Supporting Services accounts, only two methods are commonly used: time method for salaries; and quantity consumed method for other expenses. The methods used in proration between service areas, funding sources, and organizational units are more varied. Table I illustrates the preferred and alternate methods for the various types of expenditures.

Proration may not be used as a substitute for recording of actual expenditures for different activities when such is practicable. The coding structure and procedures presented in the accounting system provides the capability for recording expenditures directly. However, for the initial implementation and crosswalking in the PPBS the methods described below are recommended. Table 4 summarizes the seven methods and shows preferred and alternate methods.

The time method for prorating consists of allocating a part of an expenditure to a given activity in proportion to the time spent in the activity. For example, a staff member teaches during 75 percent of his employed time, and acts as an administrative assistant to the superintendent the other 25 percent of the time. In this case, 75 percent of his salary would be recorded under instruction accounts and 25 percent recorded under supporting

TABLE 4.

Methods for Prorating

	Time	Time Floor Area	ADM or ADA	Hour Consumption	Number of Pupils	Mileage	Quantity Consumed
	1	2	3	4	5	6	7
Instructional Services							
Payroll Expenses	P	-	A	-	-	-	-
Other Expenses	-	-	A	-	-	-	P
Supporting Services							
Payroll Expenses Administration	P	-	A	-	-	-	-
Plant Maintenance and Operation	P	A	-	-	-	-	-
Other	P	-	A	-	-	-	-
Utilities Expenses	-	A	-	A	-	-	P
Transportation Expenses	-	-	-	-	P	P*	-
Other Expenses Administration	-	-	P	-	-	-	-
Plant Maintenance and Operation	-	A	-	-	-	-	P
Other	-	-	A	-	-	-	P
Community Services							
Payroll Expenses	P	-	-	-	-	-	-
Plant Maintenance and Operation	-	P	A	-	-	-	-
Utilities Expenses	-	-	-	A	-	-	P
Other	-	-	A	-	-	-	P

* For special services such as transporting pupils on field trips.

Legend: P - Preferred
A - Alternate

services accounts.

The time-floor-area method for prorating consists of allocating a part of an expenditure to a given activity in proportion to the gross floor area used by the activity, and the length of time floor area is used. For example, the adult education activities utilize 5,000 square feet of classroom space for 6 hours a week. The classrooms are located in an elementary school with gross floor space of 60,000 square feet which is used in the regular education program for 30 hours a week. The custodial supplies expense of $12,960 is to be prorated. Based on floor space only the prorated cost of custodial supplies for the adult education program would be 5/60 or 1/12 of $12,960. If based on time used only the rate of charge would be 6/36 or 1/6 of $12,960; or $2,160. The proper method, however, is calculated by the following method; the time factor of 6/36 or 1/6 is used to adjust the floor space calculation for the adult education classes -- 1/6 of $1,080, or $180. The amount of the expenditure to be classified to the regular education account is $12,960 minus $180, or $12,780. Should either the time used or the floor space used by both programs be the same, that factor may be eliminated from the calculations.

The average-daily-membership (ADM) method for prorating consists of allocating a part of an expenditure to a given activity in proportion to the average daily membership of the pupils engaged in the activity. For example, it is desired to prorate $3,600 health service expenditures between the elementary and secondary schools; the elementary school ADM is 2,400; the secondary school ADM is 800. The ratio to be applied for the elementary school ADM is 3/4 which equates to $2,700 and the remaining $900 for health services is prorated to the secondary school. Average-daily-attendance (ADA) may

be used as a basis for proration by substituting ADA for ADM.

In the event that the ADM or ADA used for one activity is based on a different time period than the ADM or ADA for the other activity, the ratio of the time periods involved must be used to adjust the ADM or ADA accordingly. To illustrate, assume that the ADM of 2,400 was calculated on 6 hours, while the ADM of 900 was for a period of 8 hours. The adjusted ADM of the elementary school for an 8 hour period is 6/8 times 2,400 ADM; or 1,800 ADM. The resulting ratio for prorating the expenditures would be 2/3, $2,400 for the elementary school and 1/3, for the secondary school.

The hour-consumption method for prorating consists of allocating a part of an expenditure to a given activity in proportion to the length of time the activity uses the facilities, and the hourly rate at which the utility is consumed in the use of the facilities. This method applies primarily to expenditures for utilities. When facilities are metered separately, the hourly rate of consumption may be established from meter readings. Should the facilities not be metered separately, it would be necessary to estimate the hourly comsumption rate. Local utility companies may be of assistance in the estimation. The hourly comsumption rate is multiplied by the number of hours that an adult education class used the facility and the product provides the basis for pro-ration of the utility expenditures to the adult education accounts. The hourly consumption rate should be established based on normal operating periods.

The number-of-pupils method for prorating consists of allocating a part of an expenditure to an activity in proration to the actual number of pupils involved. This method applies primarily to expenditures for food services and transportation services for children. It also applies when public schools

cooperate with private schools which do not maintain ADA or ADM accounts. To illustrate, it is desired to prorate a $2,400 food service expenditure between the regular food service program and the educationally deprived program. If a total of 1,500 children were served lunches, of which 500 were considered to be participants in the educationally deprived program, 1/3 of the total expenditure, $800, would be charged to that program's accounts. This method requires that the figures used for the number of children involved be based on actual counts rather than estimated.

The mileage method for prorating consists of allocating a part of an expenditure in proportion to the mileage traveled for the activity. This method applies to prorating expenditures between the regular education program and the co-curricular or special project activities which utilize the transportation facilities. This method usually requires that the rate to be charged per mile of use be determined on an extended period of time (usually the previous year) which would include replacement costs as well as normal operating costs.

The quantity-consumed method for prorating consists of allocating a part of an expenditure to a given activity in proportion to the actual consumption of supplies or commodities. This method is a very accurate method since it utilizes actual counts of items used by the various activities. For example, assume that three activities, the elementary program, the secondary program, and the adult education program draw from the same stock of paper supplies. The count of paper used by the programs are 1/2 for the elementary program, 1/3 for the secondary program, and 1/6 for the adult education program. A $1,200 expenditure would be allocated $600, $400, and $200 respectively to the appropriate accounts.

Outline of Crosswalk Procedure

Using the techniques described above the following outline can be followed in preparing a program or project crosswalk.

1. Columnar paper should be used for these forms.

2. Use the following procedure for the preparation of the Program and Project crosswalk:

   a. The columns are headed as follows from left to right:

      (1) Column # 0 - Expenditure Account
      (2) Column # 1 - Executive Offices
      (3) Column # 2 - Long Range Planning
      (4) Column # 3 - Public Relations
      (5) Column # 4 - Social Services
      (6) Column # 5 - Intermediate Units
      (7) Column # 6 - Early Childhood Instruction
      (8) Column # 7 - Elementary Instruction
      (9) Column # 8 - Secondary Instruction
      (10) Column # 9 - Vocational-Technical Instruction
      (11) Column #10 - Special Instruction
      (12) Column #11 - Compensatory Programs
      (13) Column #12 - Guidance
      (14) Column #13 - Health Services
      (15) Column #14 - Inservice Training
      (16) Column #15 - Legal Services
      (17) Column #16 - Psychological
      (18) Column #17 - Boards and Commissions
      (19) Column #18 - PPBS
      (20) Column #19 - Pupil Transportation
      (21) Column #20 - Food Services
      (22) Column #21 - Maintenance
      (23) Column #22 - Employee Benefits
      (24) Column #23 - Informations Systems Design and Operation

   b. The lines in Column #0 are headed by the General Fund Expenditure Account numbers 0111 through 1488 as recommended in the Manual of Accounting and Related Financial Procedures for Pennsylvania School Systems. Only use those accounts shown in your current year's budget.

   c. Use the following approach in translating program(s) used in the classification system employed in the PPBS procedure:

(1) Record your data on a Worksheet. The expenditures for each account number must be broken into Salary (S), Non-Salary (NS), and Capital Outlay (CO),and Debt Service (DS) by program and project.

(2) Use the appropriate prorating techniques to transfer the expenditure accounts to the appropriate programs.

(3) The decision concerning the amount of proration of a given expenditure over several programs is yours.

(4) The relationship of account numbers to projects is based on the actual budget for each project. All costs for a given project must be recorded under the column designated for the project.

(5) Transfer the data from the worksheet to a form for each program, subprogram, or project. You can now view your entire annual budget by program-project or expenditure account.

CHAPTER SEVEN

DATA AND INFORMATION FILE RECOMMENDATIONS

The central supporting file for a PPB System is the accounting system which supplies cost data by program. An accounting system has been developed to support this PPBS and appears in a separate manual. In addition to the accounting system other support files should be maintained. Because each school district is unique there is no attempt in this manual to describe methods of collecting and storing the data for these files. It is recommended that the users of the PPBS develop the methods, techniques, and forms for handling these files which are best suited to the organization, capabilities, and limitation of their own district environment.

School District Data and Information File Recommendations

Listed below are the major data files and their contents which are recommended for an expeditious cycling of the PPB procedure. Insofar as it is possible, these information and data items should be collected prior to beginning the actual implementation. One of more letters precedes each data or information item, viz: C (current), E (expected), and P (projected). C designates the most current items. E designates items that were used last school year when preparing the current year's budget. P designates items that should be available for the current year and each of the succeeding five years.

1. Operations Data File - contains the following data relating to indicators:

   (C,E) a. Number of standard classrooms,

(C,E) b. Total number of classrooms teachers (equivalent),

(C,E) c. Total number of courses (equivalent of 200 minutes/ week) grades 7-12,

(C,E) d. Total number of professional instructional specialists,

(C,E) e. Total dollar expenditure for curriculum materials, supplies, and library books,

(C,E) f. Net total expenditures

(C,E) g. Total number of professional staff separation,

(C,E) h. Total number of professional staff,

(C,E) i. Total number of professional staff with MA degree or more,

(C,E) j. Number of students in previous year's graduati ng class attending post high school education.

(C,E) k. Number of students in previous year's graduating class.

(C,E) 1. Number of dropouts in grades 10-12,

(C,E) m. Number of pupils in grades 10-12,

(C,E) n. Mean score on language achievement test for grades 3, 6, 9, and 12 - adjusted for date of examination, and

(C,E) o. Mean score on mathematics achievement test for grades 3, 6, 9, and 12 - adjusted for date of examination.

2. Planning File - contains the most current Five-Year Plan and Programs and Ten-Year Comprehensive Long Range Plan as well as the following information:

(C) a. Current annaul detailed buget - the budget should have enough detail to allow it to be broken down by program.

(C) b. Goals which were used in the development of the current budget.

(C) c. Objectives which were used in the development of the current budget.

(C) d. Program objectives which were used in the development of the current budget.

(C) e. Sufficient information to assign non-salary expenses by Instructional Program, viz: Early Childhood, Elementary, Secondary, Vocational-Technical, and Special, and

(C) f. Sufficient detail on capital outlay to assign to program.

3. Organizational Policy File - contains all relevant policies that will influence the development of the Five-Year Plan and Programs. The file should contain at least the following policies:

(C) a. Student/teacher ratio policy,

(C) b. Staff qualifications policy,

(C) c. School grade organization policy, and

(C) d. Space utilization policy.

4. Problem Identification File - contains brief written statements identifying the nature of educational management, and/or capital program problems which the schools district is now facing.

5. Program Idea File - contains a list of suggested program changes and innovations.

6. Community Characteristics File - contains specific information for describing and assessing changes in the community and may contain the following information:

(C,P) a. Community attitudes regarding specific programs,

(C,P) b. Community attitudes regarding the educational effort of the school district,

(C,P) c. Information on employment outlook nationally, regionally, and locally, and

(C,P) d. Census and socio-economic data.

7. Demographic File - contains information on the computing of enrollment forecasts as well as subsidiary information about the student population and community characteristics which may be useful in establishing the operating requirements of the school

district. The file would contain enrollment data for:

(C,E,P) a. Early Childhood Instruction (Pre K and K),

(C,E,P) b. Elementary Instruction (grades 1-6),

(C,E,P) c. Secondary Instruction (grades 7-12)

(C,E,P) d. Vocational-Technical Instruction (grades 10-12), and,

(C,E,P) e. Special Instruction (elementary and secondary).

8. Revenue Data File - contains specific values used in the computation of revenue forecasts, such as the following:

(C,E) a. Market value of real property in district,

(C,E) b. Ratio of taxable assessed value to market value of real property,

(C,E) c. Taxable assessed value of real property in district,

(C,E) d. Population 21 and over,

(C,E) e. Working population within the district,

(C,E) f. Growth in employable population,

(C,E) g. Weighted average daily membership,

(C,E) h. Statewide market value per pupil, and

(C,E) i. Rental and Sinking Fund Payments.

9. Cost Factors File - contains a listing of variables which account for the expenditures of the school district over a given period of time. Some of these variables are:

(C) a. Average classroom teachers salary-instruction programs,

(C) b. Average salary for new entrants into all other categories of positions,

(C) c. Inflation rates you may wish to apply, and

(C) d. An itemized listed of any specific cost factors which

may apply in your school district other than the average cost which would be calculated from your current annual budget, i.e., $20 per new pupil at the secondary level for library books.

10. Personnel Factors File - contains all relevant data pertaining to personnel. The file should contain at least the following data:

(C) a. Number of personnel in each category of position,

(C) b. Number of unfilled positions,

(C) c. Number of personnel who retired at end of the previous year,

(C) d. Expected percentage retiring, i.e., what percentage will retire in a "typical" school year,

(C) e. Number of personnel who resigned at end of previous school year,

(E) f. Expected percentage resigning, i.e., what percentage of all personnel will resign in a "typical" school year, and

(E) g. Estimate of the number of classrooms teachers which you feel is a maximum you could hire in any one year.

11. Capital Improvement File - contains data relevant to capital improvements undertaken by the school district but not yet occupied. The following data should be incorporated in the file:

(E) a. Number of facilities and type (elementary and secondary)

(E) b. Number of classrooms in each facility,

(E) c. Number of students facility will accomodate,

(E) d. Debt service costs,

(E) e. Number of administrative personnel added,

(E) f. Number of support personnel added,

(E) g. Number of instructional specialists added, and

(E) h. Year in which the facility is to be opened.

SECTION III

PREPARING DATA FOR COMPUTER PROCESSING

This section is divided into five parts: (1) part A gives directions for preparing the data deck needed to operate the basic program, (2) part B gives directions for preparing the data needed for each subprogram or project, (3) part C gives direction for preparing the data needed to calculate the change in program costs created by subprograms or projects; (4) part D gives directions for preparing data needed to calculate project alternatives, and (5) part E gives directions for preparing data needed to form alternative project sets.

A complete data deck will include:

(I) Control cards prepared according to the instructions of the computer facility being utilized.

(II) A permanent data deck which contains the names of variables and constants used by the program. These cards are listed on Table A.

(III) The basic data deck prepared as directed in Section A.

(IV) Subprogram and/or project decks which are inserted in the basic program deck where appropriate, prepared according to Section B.

(V) Program change decks which are inserted with the subprogram or project decks, prepared from instructions in Section C.

(VL) Project alternative decks which are inserted in the basic deck, prepared following instructions in Section D.

(VII) Alternate set deck which is added at the end of the basic deck, prepared following instructions in Section E.

The complete deck set-up is illustrated in Figure F-I

KINDERGARTEN	
GRADES 1-6	
GRADES 7-12	
VOCATIONAL-TECHNICAL	
SPECIAL ED. 1-6	
SPECIAL ED. 7-12	ENROLLMENT
TOTAL ENROLLMENT	TITLES
AVERAGE DAILY MEMBERSHIP	
WGTD. ENROLLMENT-STAFF	
WGTD. ENROLLMENT-FINANCE	
WT. ENRLMT.-INST. SBSDY.	
WT. AVRGE. DAILY MBRSHP.	

BASIC PROGRAM COSTS	TITLES
ADJUSTED COSTS	OF
TOTAL PROGRAM COSTS	
ALTERNATIVE CASE NUMBER	COST TYPES

EXECUTIVE OFFICES 0101	3 1 212	
LONG RANGE PLANNING 0102	2 1 2	
PUBLIC RELATIONS 0202	2 1 2	PROGRAM TITLES
SOCIAL SERVICES 4404	2 1 2	AND
INTERMEDIATE UNITS 4601	2 112	PROGRAM-MANPOWER
EARLY CHILDHOOD INSTRUC 1000	3 3 917	
ELEMENTARY INSTRUCTION 1200	3 4 917	MATRIX
SECONDARY INSTRUCTION 1400	3 5 917	
VOC-TECH INSTRUCT-CATAGORYVI	3 6 917	
SPECIAL INSTRUCT-CATAGORYIII	3 7 917	

TABLE A (CONTINUED)

MANPOWER TITLES (CONTINUED)
PSYCHOLOGISTS
CLERICAL PERSONNEL
GUIDANCE COUNSELORS
MAINTENANCE PERSONNEL
TRANSPORTATION PERSONNEL
FOOD SERVICE PERSONNEL
TECHNICIANS

INDICATOR TITLES
EXCESS ENROLLMENT
TEACHERS/1000 WGT. PUPILS
SECONDARY COURSE OFFERINGS
INST.SPEC.,NURS.,PSYCH./1000 WGT. PUPILS
MATLS.,SUPPS.,LIB.BKS./WGT. PUPIL
NET EXPEND./WGT. PUPIL
PROF. STAFF TURNOVER %PCT."
PROF. STAFF MA OR MORE %PCT."
PCT. GRAD. CLASS ATTEND PHSE
DROPOUTS PCT. ENROLLMENT
LANGUAGE ACHIEVEMENT
MATHEMATICS ACHIEVEMENT

PUPIL WEIGHTS - STAFF	PUPIL WEIGHTS - FINANCE	PUPIL WEIGHTS- SUBSIDY	VO-TO S WEI
.5 1.0 1.1 1.1 1.0 1.1	.5 1.01.251.25 1.01.25	.5 1.01.361.36 1.01.36	.

COMPENSATORY INST-CATAGORYIV	3 8	917
GUIDANCE 4401	113	
HEALTH SERVICES 4402	21012	
INSERVICE TRAINING 0303	2	917
LEGAL SERVICES 0203	0	
PSYCHOLOGICAL 4403	111	
BOARDS & COMMISSIONS 0103	112	
PPBS 0104	3 1	212
PUPIL TRANSPORTATION 4605	115	
FOOD SERVICES 4606	116	
MAINTAINENCE &OPERAT 0603	114	
EMPLOYEE BENEFITS 4603	0	
INFO SYSTEMS DES OPERAT 0403	21217	

PROGRAM TITLES AND PROGRAM MANPOWER MATRIX (CONTINUED)

TOTAL ABOVE S NS CO T	PROGRAM COST CATEGORY TITLES
CY Y1 Y2 Y3 Y4 Y5	YEAR TITLES

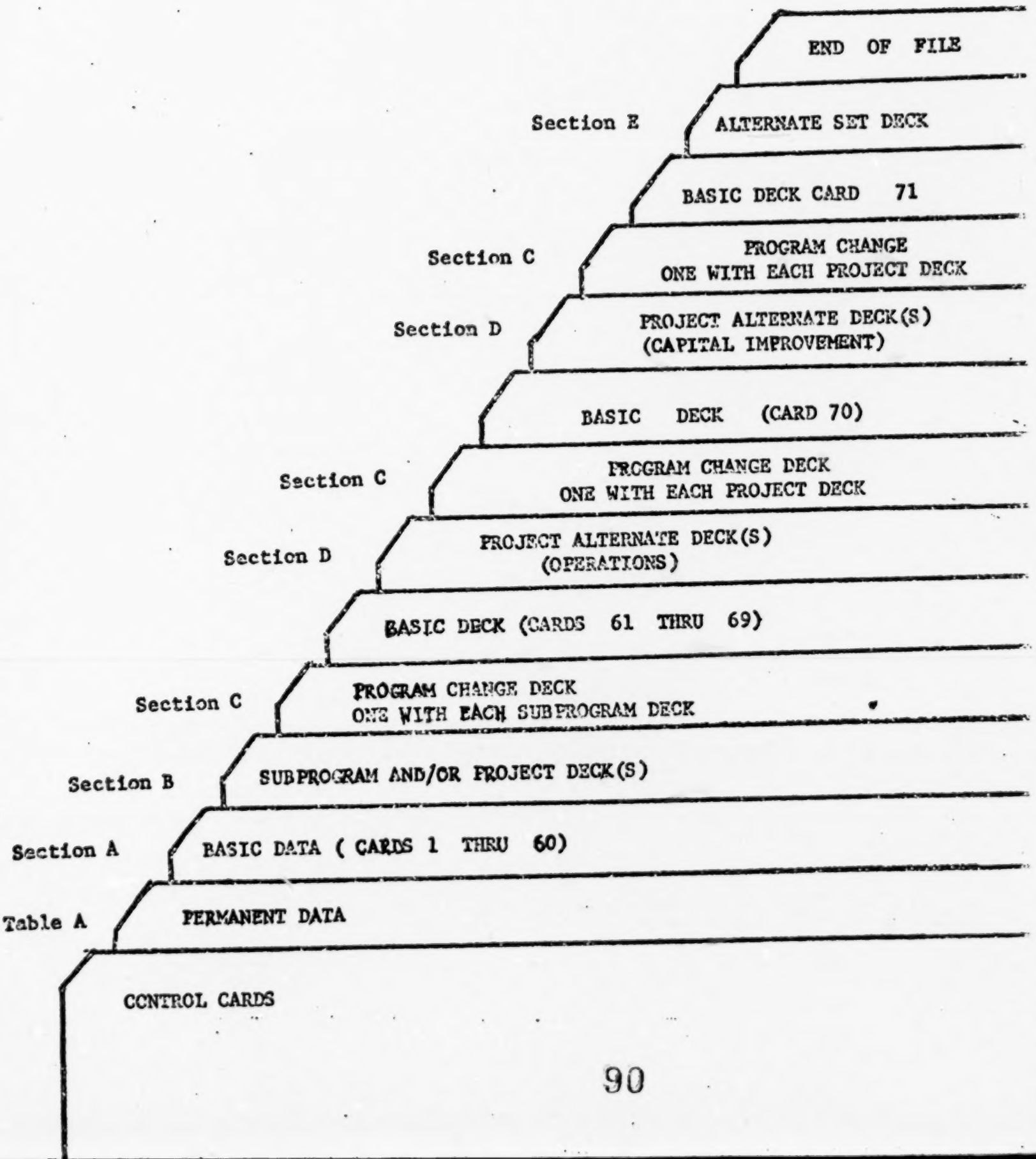
PROFESSIONAL ADMINISTRATION
ADMINISTRATIVE STAFF
TEACHERS - EARLY CHILDHOOD
TEACHERS - ELEMENTARY
TEACHERS - SECONDARY
TEACHERS - VOC.-TECH.
TEACHERS - SPECIAL
TEACHERS COMPENSATORY
INSTRUCTIONAL SPECIALISTS
MEDICAL PERSONNEL

MANPOWER TITLES

FIGURE F-I.

DECK SETUP FOR SEMI-AUTOMATED VERSION

OF LOCAL SCHOOL DISTRICT PPBS



SECTION III - A (BASIC DECK)

Instructions for Recording Input Data on Cards

Use a general purpose card punching form to record the data. Fill in the title of the program, Version III, Model 1 of PPBS - School District. Record your name and the date the data were entered on the form. Fill in the page number and the total number of pages.

Right-justify all entries on the cards. If a number 12769 is to be recorded in a set of 8 columns, make sure the last digit (9) appears in the last column: record 12769 in _ _ _ _ _ _ _ _ as _ _ _ 1 2 7 6 9. If you wish to record the number elsewhere in the set of 8 columns, you must use a decimal point - 12769 may be recorded in _ _ _ _ _ _ _ _ as _ 1 2 7 6 9 . _. If the decimal had been left off in the above example, 1276900 would have been recorded instead of 12769.

Blank fields are assumed to contain a zero, although you may record the zero if you wish. The above instructions apply to preparing data for all sections.

Card Number 1

Columns 1-40. . . . School district name and any other information to identify the computer run: such as, date, run number, and author of the data.

Card Number 2

Columns 1-4 . . . . Salary inflation percent.

Columns 5-8 . . . . Non-salary inflation percent.

Columns 9-12 . . . Vocational-Technical non-salary inflation percent, if Vocational-Technical is outside school district.

Card Number 3

Columns 1-5 . . . . CY total classrooms.

Columns 6-13 . . . .CY expenditures on curriculum materials, supplies, and library books.

Columns 14-18 . . . Attendance percent

Column 19 . . . . . Put 0 if Vocational-Technical is outside school district. Put 1 if Vocational-Technical is inside school district.

Column 20 . . . . . Put 0 if teacher manpower in adjusted costs is not to be rounded-up. Put 1 if teacher manpower in adjusted costs is to be rounded-up. For example, suppose the computation yields 39.3 teachers. If the round-up option is used, 39.3 becomes 40. If round-up option is not used, 39.3 remains 39.3.

Column 21 . . . . . Put 0 if no entering salary/teacher and no departing salary/teacher will be entered below. Put 1 if an entering salary/teacher but no departing salary/teacher will be entered below. Put 2, if both an entering salary/teacher and a departing salary/teacher will be entered below.

Column 22 . . . . . Put 0 if Kindergarten is single-session. Put 1 if Kindergarten is double-session.

Column 23 . . . . . Put 0 if no desired indicator levels will be entered below and no indicator gaps are to be calculated. Put 1 if desired indicator levels will be entered below and indicator gaps are to be calculated.

Card Number 4

Columns 1-10 . . . .CY kindergarten enrollment.

Columns 11-20 . . . CY total enrollment in grades 1-6 except for Special Education enrollment in Grades 1-6.

Columns 21-30 . . . CY total enrollment in grades 7-12 except for Vocational-Technical enrollment and Special Education enrollment in grades 7-12.

Columns 31-40. . . CY Vocational-Technical enrollment.

Columns 41-50 . . . CY Special Education enrollment in grades 1-6.

Columns 51-60 . . . CY Special Education Enrollment in grades 7-12.

Card Number 5

Y1 enrollment forecast formatted as on Card Number 4.

Card Number 6

Y2 enrollment forecast formatted as on Card Number 4.

Card Number 7

Y3 enrollment forecast formatted as on Card Number 4.

Card Number 8

Y4 enrollment forecast formatted as on Card Number 4.

Card Number 9

Y5 enrollment forecast formatted as on Card Number 5.

Card Number 10

Columns 1-4 . . . . CY manpower in full-time equivalents for the first manpower type (Professional Administration). See Table 2 for the seventeen manpower types.

Columns 5-8 . . . . CY manpower in full-time equivalents for the second manpower types (administrative staff).

Columns 9-64 . . . .CY manpower in full time equivalents for balance of manpower types (allow four columns for each type).

Columns 65-68 . . . CY manpower in full-time equivalents for the seventeenth manpower type (Technicians).

Card Number 11

Columns 1-4 . . . . Turnover rate in percent for the first manpower type (Professional Administration).

Columns 5-8 . . . . Turnover rate in percent for the second manpower type (Administrative Staff).

Columns 9-32 . . . Leave Blank

Columns 33-36 . . . Turnover rate in percent for the ninth manpower type (Instructional Specialists).

Columns 37-64 . . . Turnover rate in percent for manpower types ten through sixteen (allow four columns for each type).

TABLE 2

Manpower Numbers and Types

Number	Manpower Type
1	Professional Administration
2	Administrative Staff
3	Teachers-Early Childhood Instruction
4	Teachers-Elementary Instruction
5	Teachers-Secondary Instruction
6	Teachers-Vocational-Technical Instruction
7	Teachers-Special Instruction
8	Teachers-Compensatory
9	Instructional Specialists
10	Medical Personnel
11	Psychologists
12	Clerical Personnel
13	Guidance Counselors
14	Maintenance Personnel
15	Transportation Personnel
16	Food Service Personnel
17	Technicians

Columns 65-68 . . . Turnover rate in percent for the seventeenth manpower type (Technicians).

The turnover rate for teachers will be inputed below on Card Number 38 as Indicator #7 (Professional Staff Turnover, in Percent).

Card Number 12

Columns 1-10 . . . CY salary cost for the first program (Executive Offices). See Table 3 for a list of the twenty-three programs.

Columns 11-20 . . . CY non-salary cost for the first program.

Columns 21-30 . . . CY capital outlay for the first program.

Columns 31-40 . . . Y1 capital outlay for the first program.

Columns 41-50 . . . Y2 capital outlay for the first program.

Columns 51-60 . . . Y3 capital outlay for the first program.

Columns 61-70 . . . Y4 capital outlay for the first program.

Columns 71-80 . . . Y5 capital outlay for the first program.

Card Number 13

A card similar to Card Number 12, but for the second program (Long Range Planning).

Card Number 14

A card similar to Card Number 12, but for the third program (Public Relations).

Card Number 15

A card similar to Card Number 12, but for the fourth program (Social Services).

Card Number 16

A card similar to Card Number 12, but for the fifth program (Intermediate Units).

Card Number 17

A card similar to Card Number 12, but for the sixth program (Early Childhood Instruction).

TABLE 6

Program Numbers and Titles

with Department of Education Number

Number	Program Title	DOE Number
1	Executive Offices	0101
2	Long Range Planning	0102
3	Public Relations	0202
4	Social Services	4404
5	Intermediate Units	4601
6	Early Childhood Instruction	1000 (Subprograms Used)
7	Elementary Instruction	1200 (Subprograms Used)
8	Secondary Instruction	1400 (Subprograms Used)
9	Vocational-Technical Instruction	Cat. V (Subprograms Used)
10	Special Instruction	Cat. III (Subprograms Used)
11	Compensatory Programs	Cat. IV (Subprograms Used)
12	Guidance	4401
13	Health Services	4402
14	Inservice Training	0303
15	Legal Services	0203
16	Psychological	4403
17	Boards and Commissions	0103
18	PPBS	0104
19	Pupil Transportation	4605
20	Food Services	4606
21	Maintenance and Operation	0603
22	Employees Benefits	4603
23	Informations Systems Design and Operation	0402

Card Number 18

A card similar to Card Number 12, but for the seventh program (Elementary Instruction).

Card Number 19

A card similar to Card Number 12, but for the eighth program (Secondary Instruction).

Card Number 20

A card similar to Card Number 12, but for the ninth program (Vocational-Technical Instruction).

Card Number 21

A card similar to Card Number 12, but for the tenth program (Special Instruction).

Card Number 22

A card similar to Card Number 12, but for the eleventh program (Compensatory Instruction).

Card Number 23

A card similar to Card Number 12, but for the twelfth program (Guidance).

Card Number 24

A card similar to Card Number 12, but for the thirteenth program (Health Services).

Card Number 25

A card similar to Card Number 12, but for the fourteenth program (Inservice Training).

Card Number 26

A card similar to Card Number 12, but for the fifteenth program (Legal Services).

Card Number 27

A card similar to Card Number 12, but for the sixteenth program (Psychological).

Card Number 28

A card similar to Card Number 12, but for the seventeenth program (Boards and Commissions).

Card Number 29

A card similar to Card Number 12, but for the eighteenth program (PPBS).

Card Number 30

A card similar to Card Number 12, but for the nineteenth program (Pupil Transportation).

Card Number 31

A card similar to Card Number 12, but for the twentieth program (Food Services).

Card Number 32

A card similar to Card Number 12, but for the twenty-first program (Maintenance and Operations).

Card Number 33*

A card similar to Card Number 12, but for the twenty-second program (Employees Benefits).

* If employee benefits are pro-rated this card will be left blank but must be included in the data deck.

Card Number 34

A card similar to Card Number 12, but for the twenty-third program (Information System Design and Operation).

Card Number 35*

Columns 1-10 . . . CY Debt Service

Columns 11-20 . . . Y1 Debt Service

Columns 21-30 . . . Y2 Debt Service

Columns 31-40 . . . Y3 Debt Service

Columns 41-50 . . . Y4 Debt Service

Columns 51-60 . . . Y5 Debt Service

*When Debt Service is pro-rated over the programs Card 35 is left blank but must be included in the data deck.

Card Number 36

Columns 1-10 . . . .Pupil Transportation non-salary costs to be held constant.

Columns 11-20 . . . Maintenance and Operations non-salary costs to be held constant.

Columns 21-30 . . . Employees Benefits* non-salary costs to be held constant.

*If employee benefits are pro-rated these columns will be left blank.

Card Number 37

Columns 1-8 . . . . CY Secondary Course Offerings (Indicator #3)
See Table 4 for a list of the indicators.

Columns 9-16 . . . .Y1 Secondary Course Offerings.

Columns 17-24 . . . Y2 Secondary Course Offerings.

Columns 25-32 . . . Y3 Secondary Course Offerings.

Columns 33-40 . . . Y4 Secondary Course Offerings.

Columns 41-48 . . . Y5 Secondary Course Offerings.

Card Number 38

A card similar to Card Number 37, but for Professional Staff Turnover, in Percent (Indicator #7).

Card Number 39

A card similar to Card Number 37, but for Percent Staff with MA or better. (Indicator #8)

Card Number 40

A card similar to Card Number 37, but for Percent Graduating Class Attending PHSE (Indicator #9).

Card Number 41

A card similar to Card Number 37, but for Dropouts as a Percent of Total Enrollment (Indicator #10).

Card Number 42

A card similar to Card Number 37, but for Language Achievement (Indicator #11).

Card Number 43

A card similar to Card Number 37, but for Mathematics Achievement (Indicator #12).

Note:

1. If the option for entering desired indicator levels and for calculating indicator gaps is used, the following card numbers 44-55 must be included.

2. If the option is not used, skip down to the instructions following Card Number 55.

Card Number 44

Columns 1-8 . . . . CY desired indicator level for the first indicator (Excess Enrollment).

Columns 9-16 . . . .Y1 desired indicator level for the first indicator.

Columns 17-24 . . . Y2 desired indicator level for the first indicator.

Columns 25-32 . . . Y3 desired indicator level for the first indicator.

Columns 33-40 . . . Y4 desired indicator level for the first indicator.

Columns 41-48 . . . Y5 desired indicator level for the first indicator.

Card Number 45

Follow the instructions outlined under Card Number 44 for Indicator #2.

Card Number 46

Follow the instructions outlined under Card Number 44 for Indicator #3.

TABLE 7

Indicator Numbers and Titles

Number	Indicator Title
1	Excess Enrollment
2	Classroom teachers/1000 weighted pupils
3	Mean cumulative course offerings for grades 7-12 in 200 min./week equivalents
4	Instructional specialists, nurses, and psychologists/ weighted pupil
5	Expenditures for curriculum materials, supplies, and library books/weighted pupil
6	Net total expenditures/weighted pupil
7	Professional staff turnover in percent
8	Percent of professional staff with MA degree or more
9	Percent of graduating class attending PHSE
10	Dropouts as percent of enrollment
11	Language achievement as mean deviation from grade level
12	Mathematics achievement as mean deviation from grade level

Card Number 47

Follow the instructions outlined under Card Number 44 for Indicator #4.

Card Number 48

Follow the instructions outlined under Card Number 44 for Indicator #5.

Card Number 49

Follow the instructions outlined under Card Number 44 for Indicator #6.

Card Number 50

Follow the instructions outlined under Card Number 44 for Indicator #7.

Card Number 51

Follow the instructions outlined under Card Number 44 for Indicator #8.

Card Number 52

Follow the instructions outlined under Card Number 44 for Indicator #9.

Card Number 53

Follow the instructions outlined under Card Number 44 for Indicator #10.

Card Number 54

Follow the instructions outlined under Card Number 44 for Indicator #11.

Card Number 55

Follow the instructions outlined under Card Number 44 for Indicator #12.

Note:

1. If no entering salary/teacher and no departing salary/teacher option was specified above (on Card #3), skip down to Card Number 59 and include it as the very next card.

Card Number 56

Columns 1-6 . . . . CY entering salary/teacher for Early Childhood teachers.

Columns 7-12 . . . CY entering salary/teacher for Elementary teachers.

Columns 13-18 . . . CY entering salary/teacher for Secondary teachers.

Columns 19-24 . . . CY entering salary/teacher for Vocational-Technical teachers.

Columns 25-30 . . . CY entering salary/teacher for Special Education teachers.

Card Number 57

Columns 1-4 . . . . Inflation percent on the entering salaries/teacher.

Note:

1. If no departing salary/teacher option was specified above (on Card #3), skip down to Card Number 59 and include it as the very next card.

Card Number 58

Columns 1-6 . . . . CY departing salary/teacher for Early Childhood teachers.

Columns 7-12 . . . CY departing salary/teacher for Elementary Teachers.

Columns 13-18 . . . CY departing salary/teacher for Secondary Teachers.

Columns 19-24 . . . CY departing salary/teacher for Vocational-Technical Teachers.

Columns 25-30 . . . CY departing salary/teacher for Special Education Teachers.

Card Number 59

Columns 1-6 . . . . Total bus riders as percent of total enrollment (less .5 Kindergarten enrollment, if Kindergarten is single-session).

Read the following paragraphs before using Columns 7-54:

1. Columns 7-54 are applicable if pupil transportation is not a contractual expense, i.e., the school district owns buses and has bus drivers. (Under this condition, Card Number 10 should have some CY Transportation Personnel).

2. If pupil transportation is a contractual expense, leave columns 7-54 blank. (Under this condition, Card Number 10 should have no CY Transportation Personnel).

3. If it is desired <u>not</u> to have pupil transportation costs vary with enrollment, leave Card Number 59 blank.

Columns 7-12 . . . .CY number of buses

Columns 13-18 . . . Seats/bus

Columns 19-24 . . . Morning trips/bus

Columns 25-30 . . . Y1 capital outlay/bus

Columns 31-36 . . . Y2 capital outlay/bus

Columns 37-42 . . . Y3 capital outlay/bus

Columns 43-48 . . . Y4 capital outlay/bus

Columns 49-54 . . . Y5 capital outlay/bus

Card Number 60

Columns 1-2 . . . . Number of subprograms (elements) to be included in the Total Program Costs.

Note:

If there are no subprograms included in the total costs, make Card Number 61 the very next card after Card Number 60. If the Total Program Costs has at least one subprogram include a set of cards for each - stacking one set after another, between Card Numbers 60 and 61. See the "Input Instructions for subprograms" (Section B) to complete each set of cards.

Card Number 61

Columns 1-9 . . . . Y1 District real property market value.

Columns 10-18 . . . Y2 District real property market value.

Columns 19-27 . . . Y3 District real property market value.

Columns 28-36 . . . Y4 District real property market value.

Columns 37-45 . . . Y5 District real property market value.

Card Number 62

Columns 1-5 . . . . Y1 Assessment ratio

Columns 6-10 . . . .Y2 Assessment ratio

Columns 11-15 . . . Y3 Assessment ratio

Columns 16-20 . . . Y4 Assessment ratio

Columns 21-25 . . . Y5 Assessment ratio

Card Number 63

Columns 1-5 . . . . CY Real estate tax rate in mills.

Columns 6-10 . . . Collection percentage (assumed same for all years Y1-Y5).

Card Number 64

Columns 1-9 . . . . Y1 Total Adjustments to the gross assessed real estate tax to obtain total real estate tax.

Columns 10-18 . . . Y2 Total Adjustments to the gross assessed real estate tax to obtain total real estate tax.

Columns 19-27 . . . Y3 Total Adjustments to the gross assessed real estate tax to obtain total real estate tax.

Columns 28-36 . . . Y4 Total Adjustments to the gross assessed real estate tax to obtain total real estate tax.

Columns 37-45 . . . Y5 Total Adjustments to the gross assessed real estate tax to obtain total real estate tax.

Card Number 65

Columns 1-6 . . . . Y1 State real property market value per pupil.

Columns 7-12 . . . Y2 State real property market value per pupil.

Columns 13-18 . . . Y3 State real property market value per pupil.

Columns 19-24 . . . Y4 State real property market value per pupil.

Columns 25-30 . . . Y5 State real property market value per pupil.

Card Number 66

Columns 1-4 . . . . Y1 State subsidy per pupil.

Columns 5-8 . . . . Y2 State subsidy per pupil.

Columns 9-12 . . . Y3 State subsidy per pupil.

Columns 13-16 . . . Y4 State subsidy per pupil.

Columns 17-20 . . . Y5 State subsidy per pupil.

Card Number 67

Columns 1-9 . . . . Y1 Total adjustments to state share of district foundation to obtain net state instructional subsidy.

Columns 10-18 . . . Y2 Total adjustments to state share of district foundation to obtain net state instructional subsidy.

Columns 19-27 . . . Y3 Total adjustments to state share of district foundation to obtain net share instructional subsidy.

Columns 28-36 . . . Y4 Total adjustments to state share of district foundation to obtain net share instructional subsidy.

Columns 37-45 . . . Y5 Total adjustments to state share of district foundation to obtain net share instructional subsidy.

Card Number 68

Columns 1-9 . . . . Y1 Total revenue from all sources other than Real Estate Tax and Basic Instructional Subsidy.

Columns 10-18 . . . Y2 Total revenue from all sources other than Real Estate Tax and Basic Instructional Subsidy.

Columns 19-27 . . . Y3 Total revenue from all sources other than Real Estate Tax and Basic Instructional Subsidy.

Columns 28-36 . . . Y4 Total revenue from all sources other than Real Estate tax and Basic Instructional Subsidy.

Columns 37-45 . . . Y5 Total revenue from all sources other than Real Estate Tax and Basic Instructional Subsidy.

Card Number 69

Columns 1-2 . . . . Total number of operations project alternatives to be considered.

Note:

1. If there are no operations project alternatives, make Card Number 70 the very next card after Card Number 69.

2. If there is at least one operations project alternative, include a set of cards for each operations project alternative, stacking one set after another, between Card Number 69 and Card Number 70. See the "Input Instructions for an Operations Project Alternative" (Section D) to complete each set of cards.

Card Number 70

Columns 1-2 . . . . Total number of capital improvement project alternatives to be considered.

Note:

1. If there are no capital improvement project alternatives, make Card Number 71 the very next card after Card Number 70.

2. If there is at least one capital improvement project alternative, include a set of cards for each capital improvement project alternative, stacking one set after another, between Card Numbers 70 and 71. See the "Input Instructions for a Capital Improvement Project Alternative" Section D) to complete each set of cards.

Card Number 71

Columns 1-2 . . . . Total number of alternative sets to be formed from the operation project alternatives and capital improvement project alternatives entered previously.

Note:

1. If there are no alternative sets, Card Number 71 is the last data card of the input deck.

2. If there is at least one alternative set to be formed, include one set of cards for each alternative set, stacking one set of cards after another. See the "Input Instructions for Forming Alternative Sets" to complete each set of cards.

3. The last card of the set of cards for the last alternative set to be formed is the last card of the input deck.

SUMMARY OF THE STEPS IN PREPARING DATA CARDS FOR BASIC DECK

1. Record school district name and other run information (card #1)

2. Record inflation percents (card #2)

3. Record CY classrooms, CY expenditures for curriculum materials, supplies, and library books, attendance percent, and the five options chosen (card #3)

4. Record enrollment for each year CY-Y5 (cards #4 thru 9)

5. Record CY manpower for 17 manpower types (card #10)

6. Record manpower turnover rate (card #11)

7. For each program, record CY salary, CY non-salary, and CY-Y5 capital outlay (23 cards-numbers 12 thru 34)

8. Leave blank - or record CY-Y5 debt services if debt service is <u>not</u> prorated (card #35)

9. Record non-salary costs to be held constant for pupil transportation, operation and maintenance, and employee benefits (card #36)

10. For secondary course offerings, professional staff turnover, professional staff with MA or more, percent graduating class attending PSHE, dropouts as percent of total enrollment, language achievement, and math achievement, record CY-Y5 indicator levels. (7 cards, one for each indicator - numbers 37 thru 43)

11. For all 12 indicators, record desired levels for CY-Y5 (12 cards, one for each indicator) only if indicator gaps are desired (cards #44 thru 55)

12. For each instructional program, record CY entering salary/teacher (optional) (card #56)

13. Record inflation percent for entering salary/teacher (optional) (card #57)

14. For each instructional program, record CY departing salary/teacher (optional) (card #58)

IS BUSING A CONTRACTUAL EXPENSE?

15. (Yes) Record percent total pupils riding buses (card #59)

16. (No) Record percent total pupils riding buses, CY buses, seats/bus,

morning trips/bus, Y1-Y5 capital outlay/bus (card #59)

ARE THERE ANY SUBPROGRAMS INCLUDED IN THE TOTAL COSTS?

17. (No) Record Zero (card #60)

18. (Yes) Record the number of subprograms (card #60)

For each subprogram insert data cards prepared using the "input instructions for subprograms" (these instructions refer you to the "input instructions for a program change (Section C)" (cards #F_1, F_2, F_3, followed by the appropriate D cards)

19. Record Y1-Y5 district real property market value (card #61)

20. Record Y1-Y5 assessment ratios (card #62)

21. Record CY real estate tax in mills, and collection percentage (card #63)

22. Record Y1-Y5 total adjustments to the gross assessed real estate tax (card #64)

23. Record Y1-Y5 state real property market value per pupil (card #65)

24. Record Y1-Y5 state subsidy per pupil (card #66)

25. Record Y1-Y5 total adjustments to state share of district foundation (card #67)

26. Record Y1-Y5 total revenue from sources other than real estate tax and basic instructional subsidy (card #68)

ARE THERE ANY OPERATIONS PROJECT ALTERNATIVE FROM WHICH ALTERNATIVE SETS ARE TO BE FORMED?

27. (No) Record zero operations project alternatives (card #69)

28. (Yes) Record the number of operations project alternatives (card #69)

For each operations project alternative, insert data cards prepared using the "input to instructions for an operations project alternative (Section D)" (these instructions refer you to the "input instructions for a program change (Section C)" - (cards #R1, R2 - appropriate D cards, R3 thru R9)

ARE THERE ANY CAPITAL IMPROVEMENT PROJECT ALTERNATIVES FROM WHICH ALTERNATIVE SETS ARE TO BE FORMED?

29. (No) Record zero capital improvement project alternatives (card #70)

30. (Yes) Record the number of capital improvement project alternatives (card #70)

For each capital improvement project alternative insert data cards prepared using the "input instructions for a capital improvement project alternative (Section D)" (these instructions refer you to "input instructions for a program change (Section C)" - (cards #C_1 thru C_4 - appropriate D cards - C_5 thru C_{11})

ARE THERE ANY ALTERNATIVES SETS TO BE FORMED?

31. (No) Record zero alternative sets (card #71)

32. (Yes) Record the number of alternative sets (card #71)

For each alternative set, insert data cards prepared using the "input instructions for forming an alternative set (Section E)" (cards #S_1 thru S_4)

33. Stop

SECTION III - B (SUBPROGRAM AND PROJECT DECKS)

Input Instructions for Subprograms and Projects

Include the set of cards described here if the Total Program Costs has at least one subprogram.

Card Number F1

Columns 1-40 . . . Title of the subprogram. Precede the verbal title by the last two digits of the year and a number, i.e., "71-1 Instructional Media 1005".

Card Number F2

Columns 1-2 . . . . The year at the beginning of which the element or project costs are to be calculated. CY is represented by putting a 0 in Column 2, Y1 by 1, etc.

Columns 3-8 . . . . The number of classrooms. The number of classrooms is assumed to be available for all years from the year indicated in Columns 1-2 to Y5. Zero is placed in Column 3 if not classrooms are associated with the subprogram.

Card Number F3

Columns 1-2 . . . . The number of programs for which Adjusted Costs are changed because of the sub-program.

Note:

1. For each program the costs of which are to be changed, included a set of cards, stacking one set after another, i.e., one set of cards for each program changed. See the "Input Instructions for a Program Change (Section C)" for completing each set of cards.

Program Change Deck(s) 2

Subprogram 2

Program Change Deck(s) 1

Subprogram 1

SECTION III - C (PROGRAM CHANGE DECK)

Input Instructions for a Program Change

Each subprogram or project will change at least one program; for each subprogram or project there will be a program change deck for each program changed. If there are three subprograms each of which change two programs, there will be six program change decks, i.e. two for each of the subprograms.

If the program change calls for an increase in manpower and/or costs, record just the amount, no plus (+) sign is needed. If the program change calls for a decrease in manpower and/or costs, record a minus (-) sign before the amount.

Card Number D1

Columns 1-2 . . . . The number of the program to be changed. See Table 3 for the number corresponding to the program.

Columns 3-4 . . . . The first year of the program change. CY as the first year is represented by 0 in Column 4, Y1 as the first year by 1 in Column 4, etc.

Note:

1. If the program to be changed is Inservice Training or Legal Services, skip down to Card Number 3 and include it immediately following Card Number 1.

2. If the program to be changed is employee benefits, skip down to Card Number 5 and include it immediately following Card Number 1.

3. If the program to be changed is not Inservice, Legal Services or Employee Benefits, the program change will have manpower-salary cards. Look at Table 5 for the manpower types associated with the program to be changed. For each associated manpower type, include a manpower-salary card using Card Number D2 format. The system assumes that Table 5 includes all the possible manpower type changes which can be associated with each of the twenty-three programs.

Card Number D2

Columns 1-8 . . . . First year change in manpower in full-time equivalents

TABLE 8

Manpower Types Associated with Programs

	Program	Manpower Types	Manpower Number
1.	Executive Offices	Professional Administration	(1)
		Administrative Staff	(2)
		Clerical Personnel	(12)
2.	Long Range Planning	Professional Administration	(1)
		Administrative Staff	(2)
3.	Public Relations	Professional Administration	(1)
		Administrative Staff	(2)
4.	Social Services	Professional Administration	(1)
		Administrative Staff	(2)
5.	Intermediate Units	Professional Administration	(1)
		Clerical Personnel	(12)
6.	Early Chilhood Instruction	Teachers-Early Childhood	(3)
		Instructional Specialists	(9)
		Technicians	(17)
7.	Elementary Instruction	Teachers-Elementary	(4)
		Instructional Specialists	(9)
		Technicians	(17)
8.	Secondary Instruction	Teachers-Secondary	(5)
		Instructional Specialists	(9)
		Technicians	(17)
9.	Vo-Tech Instruction	Teachers Vocational Technical	(6)
		Instructional Specialists	(9)
		Technicians	(17)
10.	Special Instruction	Teachers-Special Instruction	(7)
		Instructional Specialists	(9)
		Technicians	(17)
11.	Compensatory Programs	Teachers-Compensatory	(8)
		Instructional Specialists	(9)
		Technicians	(17)
12.	Guidance	Guidance Counselors	(13)
13.	Health Services	Medical Personnel	(10)
		Clerks	(12)

TABLE 8 (Continued)

	Program	Manpower Types	Manpower Number
14.	Inservice Training	Administrative Staff Instructional Specialists	(2) (9)
15.	Legal Services	None	(0)
16.	Psychological	Psychologist	(11)
17.	Boards and Commissions	Clerical Personnel	(12)
18.	PPBS	**Professional** Administration Administrative Staff Clerical Personnel	(1) (2) (12)
19.	Pupil Transportation	Transportation Personnel	(15)
20.	Food Services	Food Service Personnel	(16)
21.	Maintenance	Maintenance Personnel	(14)
22.	Employee Benefits	None	(0)
23.	Information Systems Design and Operation	Administrative Staff Clerical Personnel Technicians	(2) (12) (17)

1. Card Number D3
   a. Column 1 - Write 1

2. Card Number D4
   a. Columns 1-8 - Total first year change in salary cost.

Version #2

If it is desired to input the total change in salary cost for each year from the first year to Y5:

1. Card Number D3
   a. Column 1 - Write 2

2. Card Number D4
   a. Column 1-8 - Total change in salary cost.
   b. Columns 9-16 - Total second year change in salary cost.
   c. Continue recording total changes in salary cost using sets of eight columns until Y5.

Version #3

If it is desired to input the first year change in salary cost/pupil and have the computer inflate and multiply by total weighted enrollment (staff weights) through Y5,

1. Card Number D3
   a. Column 1 - Write 3

2. Card Number D4
   a. Columns 1-8 - First year change in salary cost/pupil.

Version #4

If it is desired to input the change in salary cost/pupil for each year from the first year to Y5 and have the computer multiply by total weighted enrollment (staff weights) through Y5,

1. Card Number D3
   a. Column 1 - Write 4

2. Card Number D4
   a. Columns 1-8 - First year change in salary cost/pupil.
   b. Columns 9-16 - Second year change in salary cost/pupil.
   c. Continue recording changes in salary cost/pupil using sets of eight columns until Y5.

Skip down to Card Number D6 and include it immediately after one of the above four versions of Card Numbers D3 and D4. Remember these instructions

apply only to changes in Inservice Training or Legal Services, because these programs do not have manpower types associated with them.

Card Number D5

Card Number D5 should immediately follow Card Number D1 only if the program to be changed is Employee Benefits.

Columns 1-8 . . . . First year change in the ratio of Employee Benefits to total other salary (less Physician and Dentist salary costs).

Columns 9-16 . . . Second year change in the ratio of Employee Benefits salary.

Continue recording changes in the ratio-using sets of eight columns - until Y5.

Card Numbers D6 and D7

These instructions apply to changes in any program. Note there are four options. Version #1 is the simplest. Familiarize yourself with all four versions then choose the one most appropriate for your district.

Version #1

If it is desired to input the total change in non-salary cost for the first year and have the computer inflate the total through Y5,

1. Card Number D6

   a. Column 1 - Write 1

2. Card Number D7

   a. Columns 1-8 - Total change in first year non-salary costs.

   b. Columns 9-16 - Total change in first year capital outlay cost.

   c. Columns 17-24 - Total change in second year capital outlay cost.

   d. Continue recording total changes in capital outlay costs - using sets of eight columns - until Y5.

Version #2

If it is desired to input the total change in non-salary cost for each year from the first year to Y5,

1. Card Number D6

   a. Column 1 - Write 2.

2. Card Number D7

   a. Columns 1-8 - Total change in first year non-salary cost.

   b. Columns 9-16 - Total change in second year non-salary cost.

   c. Continue recording total changes in non-salary costs using sets of eight columns until Y5. Then, record in the next set of eight columns the total change in first year capital outlay costs. Continue recording total changes in capital outlay costs using sets of eight columns until Y5. As a check on the recording of this version of Card Number D7, use the following table:

First Year of the Program Change	Columns in Which Total First Year Change in Capital Outlay Cost is Recorded
CY	49-54
Y1	41-48
Y2	33-40
Y3	25-32
Y4	17-24
Y5	9-16

Version #3

If it is desired to input the first year change in non-salary cost/pupil and have the computer inflate and multiply by those pupils associated with the program,

1. Card Number D6

   a. Column 1 - Write 3

2. Card Number D7

   a. Columns 1-8 - First year change in non-salary cost/pupil.

b. Columns 9-16 - Total first year change in capital outlay cost.

c. Columns 17-24 - Total second year change in capital outlay cost.

d. Continue recording total changes in capital outlay costs using sets of eight columns until Y5. The following table shows the pupil population associated with the twenty-three programs:

Program	Associated Pupil Population
Early Childhood Instruction	Weighted Kindergarten Enrollment-Finance
Elementary Instruction	Grades 1-6 Enrollment
Secondary Instruction	Grades 7-12 Enrollment Plus
Vo-Tech Instruction	Vo-Tech Enrollment
	½ Vo-Tech Enrollment
Special Instruction	Weighted Special Enrollment 1-6 plus Weighted Special Enrollment 7-12 (finance weights)

e. All other programs are associated with total weighted enrollment (finance weights).

Version #4

If it is desired to input the change in non-salary cost/pupil for each year from the first year of the program change through Y5 and have the computer multiply by those pupils associated with the program.

1. Card Number D6

   a. Column 1 - Write 4.

2. Card Number D7

   a. Columns 1-8 - First year change in non-salary cost/pupil.

   b. Columns 9-16 - Second year change in non-salary cost/pupil.

   c. Continue recording changes in non-salary cost/pupil using sets of eight columns until Y5. Then, record in the next set of eight columns the total change in first year capital outlay cost. Continue recording total changes in capital outlay costs - using sets of eight columns - until Y5. As a check on the recording of this version of Card Number D7, use the table under Version #2 of Card Numbers D6 and D7 above.

d. The pupils associated with the twenty-three programs are shown in the table under Version #3 of Card Numbers D6 and D7 above.

Note:

1. If the program to be changed is neither Guidance or Operations and Maintenance, the program change is completed.

2. If the program to be changed is Operations and Maintenance, skip down to Card Number D9 and include it immediately after Card Number D7.

3. Card Number D8 (Blank, must be included if program changed is Guidance). Card Number D8 should be included after Card Number D7 only if the program to be changed is Guidance. The Guidance Program Change is Completed.

4. Card Number D9 (Blank, if debt services is pro-rated and program change is operations and maintenance). If the program to be changed is operations and maintenance, include Card Number D9 immediately after Card Number D7.

Columns 1-8 . . . . Total first year change in Debt Service.

Columns 9-16 . . . Total second year change in Debt Service.

Continue recording total changes in Debt Service using sets of eight columns until Y5. The Operations and Maintenance Program Change is Completed.

SUMMARY OF STEPS IN PREPARING DATA CARDS FOR A PROGRAM CHANGE

1. Record the appropriate program number from Table 2 and the first year of the program change (card #D1)

IS PROGRAM TO BE CHANGED OTHER THAN LEGAL SERVICES, INSERVICE TRAINING, OR EMPLOYEE BENEFITS?

2. (Yes) - See Table 5 for the manpower types associated with the program to be changed
   - For each associated manpower type, record the manpower changes and starting salary/man (card #D2 one for each manpower type associated with the program change)

3. (No) Go to next question

IS PROGRAM TO BE CHANGED LEGAL SERVICES OR INSERVICE TRAINING?

5. (Yes) - Decide which of the four versions of the salary cost input card is to be used
   - Record the chosen version. Record the salary cost (cards #D3, D4)

6. (No) Go to next question

IS THE PROGRAM CHANGED EMPLOYEES BENEFITS?

7. (Yes) Record changes in salary ratio (changes must be in employee benefits) (card #D5)

8. (No) Continue to next step

9. Decide which of the four versions of the non-salary cost and capital outlay cost input card is to be used

10. Record the chosen version, and record the non-salary costs and capital outlay costs (cards #D6 and D7)

IS PROGRAM TO BE CHANGED GUIDANCE?

11. (Yes) Insert blank card (card #D8)

12. (No) Go to next question

IS PROGRAM TO BE CHANGED OPERATIONS OR MAINTENANCE?

13. (Yes) Leave blank - or record debt service costs if debt service is not pro-rated over programs (card #D9)

14. (No) Stop

If the program to be changed by a sub-program or project is Legal Services or Inservice Training the following cards must be included in the deck set-up: D_1, D_3, D_4, D_6, D_7

If the program to be changed is employee benefits the following cards must be included in the deck set-up: D_1, D_5, D_6, D_7

If the program to be changed is Guidance the following cards must be included in the deck set-up: D_1, D_2 (one for each manpower type associated with the program) D_6, D_7, D_8

If the program to be changed is operations and maintenance the following cards must be included in the deck set-up: D_1, D_2 (one for each manpower type) D_6, D_7, D_9

If the program to be changed by a sub-program or project is other than the above, the following cards must be included in the deck set-up: D_1, D_2 (one for each manpower type) D_6, D_7

SECTION III - D (PROJECT ALTERNATE DECKS)

Input Instructions for an Operations Project Alternative

Complete the cards listed for each operations project alternative.

Card Number R1

Columns 1-40 . . . Title of the operations project alternative. Precede the verbal title with the last two digits of the year in which the project was approved and the project number, i.e., "71-1 Reading Improvement".

Card Number R2

Columns 1-2 . . . . The number of programs whose Total Costs are changed because of the operations project alternative.

Note:

1. For each program for which costs are to be changed, include a set of cards, stacking one set after another, between Card Numbers R2 and R3. See the "Input Instructions for a Program Change"(see Section C) for completing each set of cards outlined previously.

2. Find the earliest year of the program changes. This year will be used below as the first year of the indicator changes of the program alternative.

Card Number R3

Columns 1-8 . . . . First year change in Secondary Course Offerings.

Columns 9-16 . . . Second year change in Secondary Course Offerings.

Continue recording changes in Secondary Course Offerings using sets of eight columns until Y5.

Card Number R4

A card similar to Card Number R3 for Changes in Professional Staff Turnover, in Percent.

Card Number R5

A card similar to Card Number R3 for Changes in Professional Staff with MA or More, in Percent.

Card Number R6

A card similar to Card Number R3 for changes in Percent Graduating Class Attending PHSE.

Card Number R7

A card similar to Card Number R3 for Changes in Dropouts as a Percent of Total Enrollment.

Card Number R8

A card similar to Card Number R3 for Changes in Lanaguage Achievement.

Card Number R9

A card similar to Card Number R3 for Changes in Mathematics Achievement.

Input Instructions for a Capital Improvement Project Alternative

Card Number C1

Columns 1-40 . . . Title of the capital improvement project alternative. Precede each verbal title with the last two digits of the year in which the project was approved and the project number, i.e., "71-3 Little Green School Addition".

Card Number C2

Columns 1-2 . . . . The year at the beginning of which the capital improvement's classrooms become available. Y1 is represented by putting a 1 in column 2, Y2 in 2, etc.

Columns 3-8 . . . . The number of classrooms. This number is assumed to be available all years from that year indicated in Columns 1-2 to Y5. Reduction in classrooms are read in as negative numbers. For example, if in a given year a building with ten classrooms is to be demolished, enter -10 in columns 6-8.

Card Number C3

Columns 1-8 . . . . Total additional revenue resulting from the capital improvement during the first year in which classrooms are available.

Columns 9-16 . . . Total additional revenue in the next year.

Continue recording total additional revenues using sets of eight columns through Y5.

Card Number C4

Columns 1-2 . . . . The number of programs for which Total Program Costs are changed because of the capital improvement.

Note:

1. For each program whose costs are to be changed, include a set of cards, stacking one set after another, between Card Numbers C4 and C5. See the "Input Instructions for a Program Change" (see Section C) for completing each set of cards outlined previously.

2. The first year the classrooms become available will be used below as the first year of the indicator changes because of the capital improvement.

Card Number C5

Columns 1-8 . . . . First year Changes in Secondary Course Offerings.

Columns 9-16 . . . Second year Changes in Secondary Course Offerings.

Continue recording changes in Secondary Course Offerings using sets of eight columns until Y5.

Card Number C6

A card similar to Card Number C5 for Changes in Professional Staff Turnover, in Percent.

Card Number C7

A card similar to Card Number C5 for Changes in Professional Staff with MA or More, in Percent.

Card Number C8

A card similar to Card Number C5 for Changes in Percent Graduating Class Attending PHSE.

Card Number C9

A card similar to Card Number C5 for Changes in Dropouts as a Percent of Total Enrollment.

Card Number C10

A card similar to Card Number C5 for Changes in Language Achievement.

Card Number C11

A card similar to Card Number C5 for Changes in Mathematics Achievement.

SECTION III - E (ALTERNATE SET DECK)

Input Instructions for Forming an Alternative Set

Complete the cards, explained here when assembling alternative sets. Each set will include the twenty-three (23) continuing programs, the subprograms listed in Total Costs, and selected operations and capital improvement project alternatives. This section permits the user to select a combination of the project alternatives listed above and examine their combined effect.

Card Number S1

Columns 1-2 . . . . The total number of project alternatives to be included in the alternative set.

Note:

1. If the alternative set has no operations project alternatives, include Card Number S3 as the very next card after Card Number S1.

2. If the alternative set has at least one operations project alternative, include Card Number S2 as the very next card after Card Number S1.

Card Number S2

Columns 1-2 . . . . The number of the alternative set's first project alternative in the list of all the operations project alternatives. For example, Columns 1-2 would contain 10 if the alternative set's first operations alternative.

Columns 3-4 . . . . The number of the alternative set's second operations project alternative in the list of all the operations project alternatives.

Continue recording numbers of the operations project alternatives, using sets of two columns. Continue on the next card, if necessary, i.e., if the alternative set has more than twenty operations project alternatives.

Card Number S3

Columns 1-2 . . . . The total number of capital improvement project

alternatives to be included in the alternative sets.

Note:

1. If the alternative set has no capital improvement project alternatives, Card Number S3 is the last card of the set of cards comprising the alternative set to be formed.

2. If the alternative set has at least one capital improvement project alternative, Card Number S4 is the last card of the set of cards comprising the alternative set to be formed.

Card Number S4

Columns 1-2 . . . . The number of the alternative set's first capital improvement project alternative in the list of all the captial improvement project alternatives. For example, Column 2 would contain five, if the alternative set's first capital improvement project alternative was the fifth potential capital improvement project alternative.

Columns 3-4 . . . . The number of the alternative set's second capital improvement project alternative in the list of the capital improvement project alternatives.

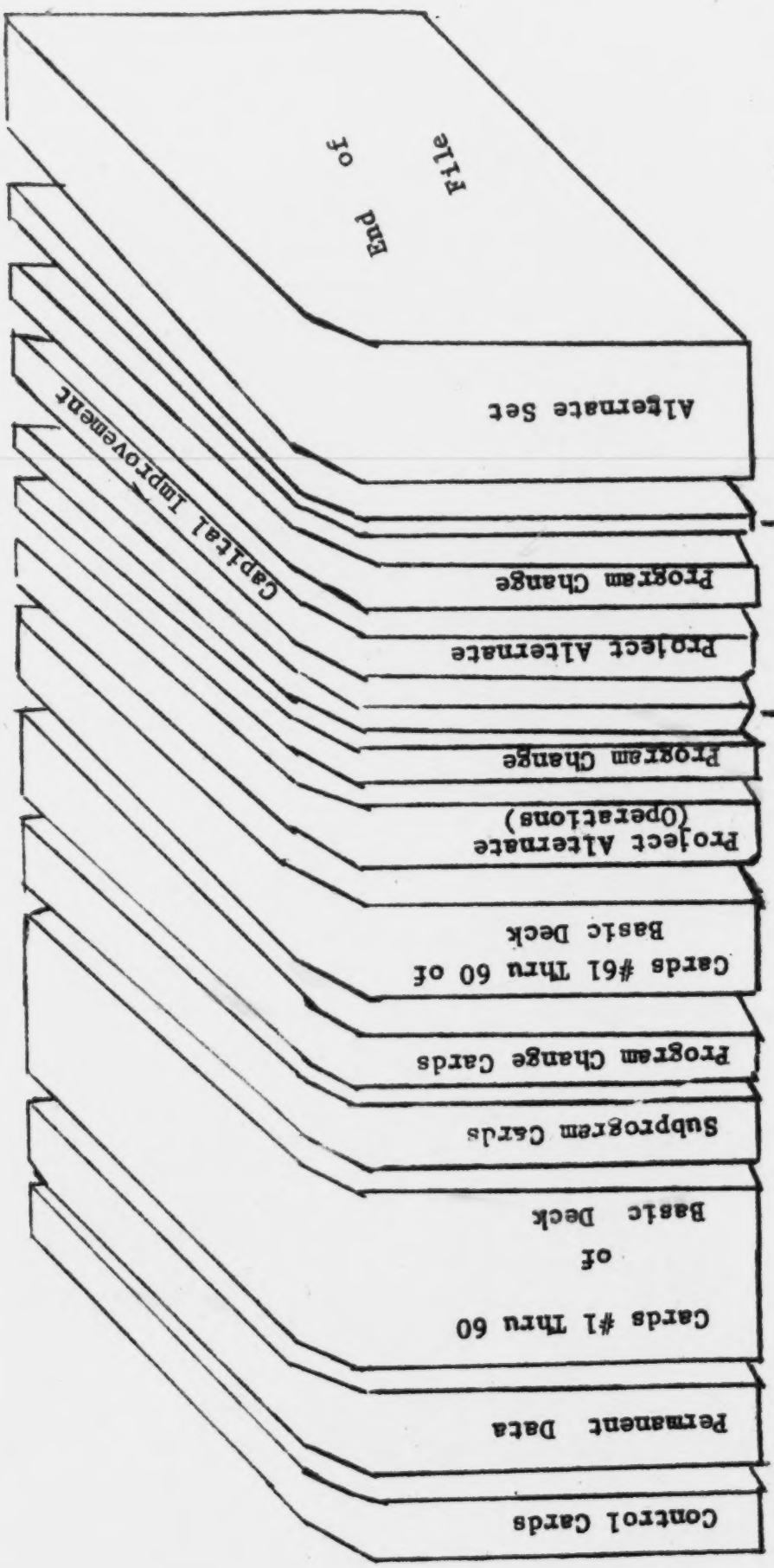
Continue recording numbers of capital improvement project alternatives, using sets of two columns. Continue on the next card, if necessary, i.e., if the alternative set has more than twenty capital improvements.

Now that the data is all recorded see Figure F-I or F-II for complete deck set-up.

FIGURE F-II

DECK SET-UP FOR SEMI-AUTOMATED VERSION

OF LOCAL SCHOOL DISTRICT PPBS



APPENDIX A

DEPARTMENT OF EDUCATION
PPB PROGRAM STRUCTURE

(Starred (*) items correspond to programs in the local school district PPPBS

Category I General Administration and Support

01 Executive Directors

* 01 Executive Offices

* 02 Long-range Planning

* 03 Boards and Commissions (Inter-Intra Agency)

* 04 Program-Planning and Budgeting

02 Immediate Staff Services

01 Government Relations (Inter-Intra Agency)

* 02 Public Relations

* 03 Legal Services

04 Grants & Subsidies Administration

03 Manpower Management

01 Planning and Research

02 Recruitment and Assignment

* 03 Training

04 Classification and Pay

05 Employe Relations and Benefits Administration

04 Information Management

01 Financial Reporting and Control Systems

* 02 Information Systems Design and Operation

05 General Research and Special Studies

01 Cost Reduction

02 In-House Special Studies

03 Contracted Special Studies

04 Management Analysis Studies

05 General Information Publications

06 Office Support Services

01 Procurement and Distribution Services

02 Technical Services

* 03 Maintenance Services

07 Library Services

01 State Library

02 Library Development

03 Library Services to the Handicapped

Category II General Instructional Support and Improvement

* 10 Pre School

01 Financial Assistance (Subsidies and grants)

02 Instructional Research

03 Program Development and Dissemination

04 Faculty Development

05 Instructional Media

06 Innovative Programs

07 School Evaluation and Program Review

* 12 Elementary

01 Financial Assistance (Subsidies and grants)

02 Instructional Research

03 Program Development and Dissemination

04 Faculty Development

05 Instructional Media

06 Innovative Programs

07 School Evaluation and Program Review

* 14 Secondary

01 Financial Assistance (Subsidies and grants)

02 Instructional Research

03 Program Development and Dissemination

04 Faculty Development

05 Instructional Media

06 Innovative Program

07 School Evaluation and Program Review

Category III *Special Education

16 Mentally Handicapped

01 Support of Children in Public Schools

02 Support of Children in Approved Private Schools

03 Support of Home Bound Children

18 Physically Handicapped

01 Support of Children in Public Schools

02 Support of Children in Approved Private Schools

03 Support of Home Bound Children

20 Gifted

01 Support of Children in Public Schools

02 Support of Children in Approved Private Schools

03 Support of Home Bound Children

21 Program Administration

01 Program Development Dissemination

02 Faculty Development

03 Instructional Media

Category IV * Compensatory Programs

22 Pre School

01 Comprehensive Planning

02 Program Development

03 Program Dissemination

04 Evaluation Activities

24 Early Elementary

01 Comprehensive Planning

02 Program Development

03 Program Dissemination

04 Evaluation Activities

26 Later Elementary

01 Comprehensive Planning

02 Program Development

03 Program Dissemination

04 Evaluation Activities

28 Secondary

01 Comprehensive Planning

02 Program Development

03 Program Dissemination

04 Evaluation Activities

Category V * Vocational Education

32 Secondary Education

01 Regular

02 Handicapped

03 Disadvantaged

04 Work-Study

34 Post Secondary Education

01 Regular

02 Handicapped

03 Disadvantaged

04 Work-Study

05 Cooperative

36 Adult Education

01 Job Oriented Occupational Education

38 Program Administration

01 Financial Assistance (Subsidies and grants to secondary and post secondary)

02 Instructional Research

03 Program Development and Dissemination

04 Faculty Development

05 Instructional Media

06 Innovative Program

07 School Evaluation and Program Review

40 Public Service Training

01 Correctional Services

02 Governmental Administrative Services

03 School Support Services

04 Protection Services

05 Transportation Training

06 Health and Sanitation Services

07 Civil Defense Services

42 Community Education

01 Adult Enrichment Programs

02 Adult Basic Education

03 Recreation Services

Category VI Supporting Services

44 Pupil Personnel Services

* 01 Guidance

* 02 Health Services

* 03 Psychological Services

* 04 Social Services

46 Administrative and Facility Support

* 01 County Offices/Intermediate Units

02 School Construction

* 03 Employee Benefits

04 Technical and Administrative Assistance

* 05 Transportation

* 06 School Food Services

48 Basic Education Review

01 Quality Assessment

02 Licensing of Private Schools

Category VII Higher Education

80 Academic Services

01 Undergraduate Instruction Including Occupational and Technical Training Programs

02 Graduate and Professional Instruction Programs

03 Continuing Education, Public Service and Teacher Training Programs

04 Instructional Support Programs (Media-Library and Learning/Teaching Research)

82 Faculty and Student Services

01 Professional (Educational) Certification Programs

02 Professional Development and Negotiations

03 Student Admissions and (Curricula) Guidance Programs

04 Student Financial Assistance and Placement

84 Management Services

01 Administration of Federal Support

02 Fiscal Reviews and Financial Advisement

03 Development of Budgetary Information Systems and Appropriation Allocation Methods

04 General "Office" Support and Coordinative Management System Services

86 Institutional Development Services

01 Facility Evaluation, Utilization and Acquisition (Includes Financing Exclusive of Federal Support)

02 Institutional Evaluation and Development Programs (Total Institutional Evaluation and Certification Aspects)

03 Building Development and Improvement (Includes Collateral Equipment)

04 Instructional Equipment Evaluation and Acquisition (Includes Financing)

83 Advance Planning Services

01 Master Planning

02 Educational Research Planning

03 Educational Statistical Analysis

04 Long-Range Planning for Institutions and Curricula

89 Evaluation Services

01 Instructional Functions and Demographic Factors (Includes Population and Out-migration Patterns)

02 Faculty-Student Relations (Includes Factors Influencing Student Demand and Admissions)

03 Management and Administration (Includes the Cost Burden Incidence and Institutional Performance)

04 Higher Education Systems for Pennsylvania

APPENDIX B

PRINT-OUT FOR SEMI-AUTOMATED VERSION

DING A LING SCHOOL DISTRICT, SKIBO,PENNA

ENROLLMENT FORECAST

	CY	Y1	Y2	Y3	Y4	Y5
KINDERGARTEN	880.00	882.00	874.00	866.00	858.00	850.00
GRADES 1-6	4674.00	4921.00	4924.00	4928.00	4930.00	4934.00
GRADES 7-12	4050.00	4343.00	4480.00	4619.00	4758.00	4895.00
VOCATIONAL-TECHNICAL	0.00	0.00	0.00	0.00	0.00	0.00
SPECIAL ED. 1-6	54.00	57.00	58.00	59.00	60.00	61.00
SPECIAL ED. 7-12	81.00	86.00	87.00	88.00	89.00	90.00
TOTAL ENROLLMENT	9739.00	10289.00	10423.00	10560.00	10695.00	10830.00
AVERAGE DAILY MEMBERSHIP	9544.22	10083.22	10214.54	10348.80	10481.10	10613.40
WGTD. ENROLLMENT-STAFF	10152.10	10731.90	10879.70	11030.70	11179.70	11328.50
WGTD. ENROLLMENT-FINANCE	10771.75	11396.25	11564.75	11735.75	11906.75	12076.25
WT. ENRLMT.-INST. SBSDY.	10786.16	11442.44	11630.12	11821.52	12010.92	12199.60
WT. AVPGE. DAILY MBRSHP.	10570.44	11213.59	11397.52	11585.09	11770.70	11955.61

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SUBSIDIARY DATA

ATTENDANCE PERCENT 98.00

	STAFF WEIGHT	FINANCE WEIGHT	SUBSIDY WEIGHT
KINDERGARTEN	1.000	1.000	.500
GRADES 1-6	1.000	1.000	1.000
GRADES 7-12	1.100	1.250	1.360
VOCATIONAL-TECHNICAL	.550	.625	1.360
SPECIAL ED. 1-6	1.000	1.000	1.000
SPECIAL ED. 7-12	1.100	1.250	1.360

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NON-SALARY COSTS HELD CONSTANT

PUPIL TRANSPORTATION 4605	0.00
MAINTAINENCE [CPERAT 0603	0.00
EMPLOYEE BENEFITS 4603	0.00

PROGRAM COSTS

		CY	Y1	Y2	Y3	Y4	Y5
EXECUTIVE OFFICES 0101	S	457454.00	480746.70	504784.03	530023.24	556524.40	584350.62
	NS	23400.00	24336.00	25309.44	26321.82	27374.69	28469.68
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	481254.00	505082.70	530093.47	556345.05	583899.09	612820.30
LONG RANGE PLANNING 0102	S	27713.00	29098.65	30553.58	32081.26	33685.32	35369.59
	NS	4400.00	4576.00	4759.04	4949.40	5147.38	5353.27
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	32113.00	33674.65	35312.62	37030.66	38832.70	40722.86
PUBLIC RELATIONS 0202	S	16050.00	16852.50	17695.12	18579.88	19508.88	20484.32
	NS	6500.00	6760.00	7030.40	7311.62	7604.08	7908.24
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	22550.00	23612.50	24725.52	25891.50	27112.96	28392.56
SOCIAL SERVICES 4404	S	0.00	0.00	0.00	0.00	0.00	0.00
	NS	0.00	0.00	0.00	0.00	0.00	0.00
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	0.00	0.00	0.00	0.00	0.00	0.00
INTERMEDIATE UNITS 4601	S	0.00	0.00	0.00	0.00	0.00	0.00
	NS	29500.00	30680.00	31907.20	33183.49	34510.83	35891.26
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	29500.00	30680.00	31907.20	33183.49	34510.83	35891.26
EARLY CHILDHOOD INSTRUC 1000	S	227461.00	238834.05	250775.75	263314.54	276480.27	290304.28
	NS	38000.00	39520.00	41100.80	42744.83	44454.63	46232.81
	CO	144800.00	150000.00	160000.00	175000.00	190000.00	200000.00
	T	410261.00	428354.05	451876.55	481059.37	510934.89	536537.09
ELEMENTARY INSTRUCTION 1200	S	1528458.00	1604880.90	1685124.94	1769381.19	1857850.25	1950742.76
	NS	91300.00	94952.00	98750.08	102700.08	106808.09	111080.41
	CO	759000.00	800000.00	850000.00	920000.00	1000000.00	1100000.00
	T	2378758.00	2499832.90	2633875.02	2792081.28	2964658.34	3161823.17
SECONDARY INSTRUCTION 1400	S	2224610.00	2335840.50	2452632.52	2575264.15	2704027.36	2839228.73
	NS	135500.00	140920.00	146556.80	152419.07	158515.83	164856.47
	CO	943476.00	1000000.00	1100000.00	1150000.00	1150000.00	1200000.00
	T	3303586.00	3476760.50	3699189.32	3877683.22	4012543.19	4204085.20
VOC-TECH INSTRUCT-CATAGORYVI	S	0.00	0.00	0.00	0.00	0.00	0.00
	NS	8250.00	8580.00	8923.20	9280.13	9651.33	10037.39
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	8250.00	8580.00	8923.20	9280.13	9651.33	10037.39
SPECIAL INSTRUCT-CATAGORYIII	S	93630.00	98311.50	103227.07	108388.43	113807.85	119498.24
	NS	10075.00	10479.04	10898.20	11334.13	11787.49	12258.99
	CO	60000.00	60000.00	65000.00	65000.00	70000.00	70000.00
	T	163705.00	168790.54	179125.28	184722.56	195595.35	201757.24
COMPENSATORY INST-CATAGORYIV	S	197962.00	207860.10	218253.10	229165.76	240624.05	252655.25
	NS	21300.00	22152.00	23038.08	23959.60	24917.99	25914.71
	CO	45968.00	48000.00	49000.00	50000.00	51000.00	52200.00
	T	265230.00	278012.10	290291.18	303125.36	316542.04	330769.96
GUIDANCE 4401	S	162212.00	170322.60	178838.73	187780.67	197169.70	207028.18
	NS	7500.00	7800.00	8112.00	8436.48	8773.94	9124.90

	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	169712.00	178122.60	186950.73	196217.15	205943.64	216153.08
HEALTH SERVICES 4402	S	96461.00	101284.05	106349.25	111665.67	117248.95	123111.40
	NS	7900.00	8216.00	8544.64	8886.43	9241.88	9611.56
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	104361.00	109500.05	114892.89	120552.09	126490.83	132722.95
INSERVICE TRAINING 0303	S	0.00	0.00	0.00	0.00	0.00	0.00
	NS	10500.00	10920.00	11356.80	11811.07	12283.51	12774.86
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	10500.00	10920.00	11356.80	11811.07	12283.51	12774.86
LEGAL SERVICES 0203	S	0.00	0.00	0.00	0.00	0.00	0.00
	NS	2800.00	2912.00	3028.48	3149.62	3275.60	3406.63
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	2800.00	2912.00	3028.48	3149.62	3275.60	3406.63
PSYCHOLOGICAL 4403	S	39590.00	41569.50	43647.97	45830.37	48121.89	50527.99
	NS	0.00	0.00	0.00	0.00	0.00	0.00
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	39590.00	41569.50	43647.97	45830.37	48121.89	50527.99
BOARDS [COMMISSIONS 0103	S	856.00	898.80	943.74	990.93	1040.47	1092.50
	NS	62200.00	64688.00	67275.52	69966.54	72765.20	75675.81
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	63056.00	65586.80	68219.26	70957.47	73805.68	76768.31
PPBS 0104	S	10000.00	10500.00	11025.00	11576.25	12155.06	12762.82
	NS	1300.00	1352.00	1406.08	1462.32	1520.82	1581.65
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	11300.00	11852.00	12431.08	13038.57	13675.88	14344.46
PUPIL TRANSPORTATION 4605	S	200839.00	210880.95	221425.00	232495.25	244121.06	256327.11
	NS	52500.00	54600.00	56784.00	59055.36	61417.57	63874.28
	CO	10000.00	10000.00	10000.00	15000.00	15000.00	15000.00
	T	263339.00	275480.95	288209.00	306551.61	320538.63	335201.39
FOOD SERVICES 4606	S	11770.00	12358.50	12976.42	13625.25	14306.51	15021.83
	NS	2600.00	2704.00	2812.16	2924.65	3041.63	3163.30
	CO	10500.00	5000.00	2500.00	1000.00	500.00	0.00
	T	24970.00	20062.50	18288.58	17549.89	17848.14	18185.13
MAINTAINENCE [OPERAT 0603	S	289328.00	303794.40	318984.12	334933.33	351679.99	369263.99
	NS	289610.00	301194.40	313242.18	325771.86	338802.74	352354.85
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	578938.00	604988.80	632226.30	660705.19	690482.73	721618.84
EMPLOYEE BENEFITS 4603	S	0.00	0.00	0.00	0.00	0.00	0.00
	NS	0.00	0.00	0.00	0.00	0.00	0.00
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	0.00	0.00	0.00	0.00	0.00	0.00
INFO SYSTEMS DES OPERAT 0403	S	10000.00	10500.00	11025.00	11576.25	12155.06	12762.82
	NS	1000.00	1040.00	1081.60	1124.86	1169.86	1216.65
	CO	5100.00	10000.00	10000.00	25000.00	100000.00	100000.00
	T	16100.00	21540.00	22106.60	37701.11	113324.92	113979.47
TOTAL ABOVE	S	5594794.00	5874533.70	6168260.38	6476673.40	6800507.07	7140532.43
	NS	806136.00	838381.44	871916.70	906793.37	943065.10	980787.70
	CO	1978844.00	2083000.00	2246500.00	2401000.00	2576500.00	2737200.00
	T	8379774.00	8795915.14	9286677.08	9784466.77	10320072.17	10858520.13
DEBT SERVICE		0.00	0.00	0.00	0.00	0.00	0.00
TOTAL COST		8379774.00	8795915.14	9286677.08	9784466.77	10320072.17	10858520.13

(3A)

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MANPOWER (FULL-TIME EQUIVALENTS)

		CY	Y1	Y2	Y3	Y4	Y5
OFESSIONAL ADMINISTRATION	P	4.00	4.00	4.00	4.00	4.00	4.00
TURNOVER RATE 2.0	H	.08	.08	.08	.08	.08	
MINISTRATIVE STAFF	P	25.00	25.00	25.00	25.00	25.00	25.00
TURNOVER RATE 5.0	H	1.25	1.25	1.25	1.25	1.25	
ACHERS - EARLY CHILDHOOD	P	21.00	21.00	21.00	21.00	21.00	21.00
SEE INDICATOR 7	H	3.53	3.53	3.53	3.53	3.53	
ACHERS - ELEMENTARY	P	143.00	143.00	143.00	143.00	143.00	143.00
SEE INDICATOR 7	H	24.02	24.02	24.02	24.02	24.02	
ACHERS - SECONDARY	P	200.00	200.00	200.00	200.00	200.00	200.00
SEE INDICATOR 7	H	33.60	33.60	33.60	33.60	33.60	
ACHERS - VOC.-TECH.	P	0.00	0.00	0.00	0.00	0.00	0.00
SEE INDICATOR 7	H	0.00	0.00	0.00	0.00	0.00	
ACHERS - SPECIAL	P	9.00	9.00	9.00	9.00	9.00	9.00
SEE INDICATOR 7	H	1.51	1.51	1.51	1.51	1.51	
ACHERS COMPENSATORY	P	18.00	18.00	18.00	18.00	18.00	18.00
SEE INDICATOR 7	H	3.02	3.02	3.02	3.02	3.02	
STRUCTIONAL SPECIALISTS	P	64.00	64.00	64.00	64.00	64.00	64.00
TURNOVER RATE 2.0	H	1.28	1.28	1.28	1.28	1.28	
DICAL PERSONNEL	P	9.00	9.00	9.00	9.00	9.00	9.00
TURNOVER RATE 2.0	H	.18	.18	.18	.18	.18	
YCHOLOGISTS	P	2.00	2.00	2.00	2.00	2.00	2.00
TURNOVER RATE 2.0	H	.04	.04	.04	.04	.04	
ERICAL PERSONNEL	P	35.00	35.00	35.00	35.00	35.00	35.00
TURNOVER RATE 20.0	H	7.00	7.00	7.00	7.00	7.00	
IDANCE COUNSELORS	P	6.00	6.00	6.00	6.00	6.00	6.00
TURNOVER RATE 3.0	H	.18	.18	.18	.18	.18	
INTENANCE PERSONNEL	P	46.00	46.00	46.00	46.00	46.00	46.00
TURNOVER RATE 10.0	H	4.60	4.60	4.60	4.60	4.60	
ANSPORTATION PERSONNEL	P	58.00	58.00	58.00	58.00	58.00	58.00
TURNOVER RATE 15.0	H	8.70	8.70	8.70	8.70	8.70	
OD SERVICE PERSONNEL	P	1.00	1.00	1.00	1.00	1.00	1.00
TURNOVER RATE 2.0	H	.02	.02	.02	.02	.02	
CHNICIANS	P	4.00	4.00	4.00	4.00	4.00	4.00
TURNOVER RATE 2.0	H	.08	.08	.08	.08	.08	
TAL POSITIONS		645.00	645.00	645.00	645.00	645.00	645.00
TAL HIRES		89.10	89.10	89.10	89.10	89.10	

DING A LING SCHOOL DISTRICT, SKIBO,PENNA BASIC PROGRAM COSTS

INDICATORS

	CY	Y1	Y2	Y3	Y4	Y5
EXCESS ENROLLMENT	1869.22	2408.22	2539.54	2673.80	2806.10	2938.40
TEACHERS/1000 WGT. PUPILS	38.51	36.43	35.94	35.45	34.97	34.51
SECONDARY COURSE OFFERINGS	150.00	150.00	153.00	153.00	153.00	150.00
INST.SPEC.,NURS.,PSYCH./1000 WGT. PUPILS	7.39	6.99	6.89	6.80	6.71	6.62
MATLS..SUPPS..LIB.BKS./WGT. PUPIL	24.43	24.02	24.62	25.23	25.86	26.52
NET EXPEND./WGT. PUPIL	777.17	771.07	802.24	832.87	865.93	898.33
PROF. STAFF TURNOVER ≥PCT.↑	16.80	16.80	16.80	16.80	16.80	16.80
PROF. STAFF MA OR MORE ≥PCT.↑	31.00	31.00	31.00	31.00	31.00	31.00
PCT. GRAD. CLASS ATTEND PHSE	65.00	65.00	70.00	70.00	70.00	75.00
DROPOUTS PCT. ENROLLMENT	.60	.60	.60	.60	.80	.80
LANGUAGE ACHIEVEMENT	.71	.71	.71	.71	.71	.71
MATHEMATICS ACHIEVEMENT	.12	.12	.12	.12	.12	.12

SUBSIDIARY DATA

CLASSROOMS	307.00	307.00	307.00	307.00	307.00	307.00
MATLS..SUPPS..LIB.BKS.	253200.00	273728.00	284677.12	296064.20	307905.77	320223.04

INDICATOR GAPS *

		CY	Y1	Y2	Y3	Y4	Y5
EXCESS ENROLLMENT	D	700.00	700.00	700.00	700.00	700.00	700.00
	A	1601.70	2434.29	2961.47	3503.49	4053.44	4599.42
	G	-901.70	-1734.29	-2261.47	-2803.49	-3353.44	-3899.42
TEACHERS/1000 WGT. PUPILS	D	50.00	50.00	50.00	50.00	50.00	50.00
	A	44.09	41.38	39.81	38.31	36.90	35.59
	G	5.91	8.62	10.19	11.69	13.10	14.41
SECONDARY COURSE OFFERINGS	D	180.00	180.00	180.00	180.00	180.00	180.00
	A	167.00	167.00	167.00	167.00	167.00	167.00
	G	13.00	13.00	13.00	13.00	13.00	13.00
INST.SPEC.,NURS.,PSYCH./1000 WGT. PUPILS	D	10.00	10.00	10.00	10.00	10.00	10.00
	A	9.23	8.66	8.33	8.02	7.72	7.45
	G	0.77	1.34	1.67	1.98	2.28	2.55
MATLS.,SUPPS.,LIB.BKS./WGT. PUPIL	D	12.00	12.00	12.00	12.00	12.00	12.00
	A	8.39	8.11	8.03	7.96	7.89	7.83
	G	3.61	3.89	3.97	4.04	4.11	4.17
NET EXPEND./WGT. PUPIL	D	900.00	900.00	900.00	900.00	900.00	900.00
	A	863.22	855.11	867.44	880.67	895.55	912.73
	G	36.78	44.89	32.56	19.33	4.45	-12.73
PROF. STAFF TURNOVER (PCT.)	D	10.00	10.00	10.00	10.00	10.00	10.00
	A	14.00	14.00	14.00	14.00	14.00	14.00
	G	-4.00	-4.00	-4.00	-4.00	-4.00	-4.00
PROF. STAFF MA OR MORE (PCT.)	D	30.00	30.00	30.00	30.00	30.00	30.00
	A	19.00	19.00	19.00	19.00	19.00	19.00
	G	11.00	11.00	11.00	11.00	11.00	11.00
PCT. GRAD. CLASS ATTEND PHSE	D	70.00	70.00	70.00	70.00	70.00	70.00
	A	67.10	67.10	67.10	67.10	67.10	67.10
	G	2.90	2.90	2.90	2.90	2.90	2.90
DROPOUTS PCT. ENROLLMENT	D	1.00	1.00	1.00	1.00	1.00	1.00
	A	1.20	1.20	1.20	1.20	1.20	1.20
	G	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20
LANGUAGE ACHIEVEMENT	D	2.00	2.00	2.00	2.00	2.00	2.00
	A	1.76	1.76	1.76	1.76	1.76	1.76
	G	0.24	0.24	0.24	0.24	0.24	0.24
MATHEMATICS ACHIEVEMENT	D	1.75	1.75	1.75	1.75	1.75	1.75
	A	1.35	1.35	1.35	1.35	1.35	1.35
	G	0.40	0.40	0.40	0.40	0.40	0.40

* Not used in simulation, Data from original pilot.

DING A LING SCHOOL DISTRICT, SKIBO,PENNA ADJUSTED COSTS

SUBSIDIARY DATA ON PROGRAM-EARLY CHILDHOOD INSTRUC 1000

PUPIL-TEACHER RATIO 41.90

	CY	Y1	Y2	Y3	Y4	Y5
MEAN SALARY/TCHER IN SYSTEM AT CY	10831.48	11373.05	11941.70	12538.79	13165.73	13824.01
NON-SALARY COST/PUPIL	43.182	44.909	46.705	48.574	50.517	52.537

SUBSIDIARY DATA ON PROGRAM-ELEMENTARY INSTRUCTION 1200

PUPIL-TEACHER RATIO 32.69

	CY	Y1	Y2	Y3	Y4	Y5
MEAN SALARY/TCHER IN SYSTEM AT CY	10688.52	11222.94	11784.09	12373.30	12991.96	13641.56
NON-SALARY COST/PUPIL	19.534	20.315	21.128	21.973	22.852	23.766

SUBSIDIARY DATA ON PROGRAM-SECONDARY INSTRUCTION 1400

PUPIL-TEACHER RATIO 20.25

	CY	Y1	Y2	Y3	Y4	Y5
MEAN SALARY/TCHER IN SYSTEM AT CY	11123.05	11679.20	12263.16	12876.32	13520.14	14196.14
NON-SALARY COST/PUPIL	33.457	34.795	36.187	37.634	39.140	40.705

SUBSIDIARY DATA ON PROGRAM-VOC-TECH INSTRUCT-CATAGORYVI

PUPIL-TEACHER RATIO 0.00

	CY	Y1	Y2	Y3	Y4	Y5
MEAN SALARY/TCHER IN SYSTEM AT CY	0.00	0.00	0.00	0.00	0.00	0.00
NON-SALARY COST/PUPIL	0.000	0.000	0.000	0.000	0.000	0.000

SUBSIDIARY DATA ON PROGRAM-SPECIAL INSTRUCT-CATAGORYIII

PUPIL-TEACHER RATIO 15.90

	CY	Y1	Y2	Y3	Y4	Y5
MEAN SALARY/TCHER IN SYSTEM AT CY	10403.33	10923.50	11469.67	12043.16	12645.32	13277.58
NON-SALARY COST/PUPIL	64.902	67.498	70.198	73.006	75.926	78.963

SUBSIDIARY DATA ON PROGRAM-GUIDANCE 4401

	CY	Y1	Y2	Y3	Y4	Y5
NON-SALARY COST/PUPIL	.696	.724	.753	.783	.815	.847

SUBSIDIARY DATA ON PROGRAM-INSERVICE TRAINING 0303

	CY	Y1	Y2	Y3	Y4	Y5
SALARY COST/PUPIL	0.000	0.000	0.000	0.000	0.000	0.000
NON-SALARY COST/PUPIL	.975	1.014	1.054	1.096	1.140	1.186

SUBSIDIARY DATA ON PROGRAM-LEGAL SERVICES 0203

	CY	Y1	Y2	Y3	Y4	Y5
SALARY COST/PUPIL	0.000	0.000	0.000	0.000	0.000	0.000
NON-SALARY COST/PUPIL	.260	.270	.281	.292	.304	.316

SUBSIDIARY DATA ON PROGRAM-FOOD SERVICES 4606

	CY	Y1	Y2	Y3	Y4	Y5
NON-SALARY COST/PUPIL	.241	.251	.261	.272	.282	.294

SUBSIDIARY DATA ON PROGRAM-EMPLOYEE BENEFITS 4603

CY FIXED CHARGES SALARY/TOTAL SALARY - FIXED CHARGES, MEDICAL, AND DENTAL SALARIES 0.0000

PROGRAM COSTS

		CY	Y1	Y2	Y3	Y4	Y5
EXECUTIVE OFFICES 0101	S	457854.00	480746.70	504784.03	530023.24	556524.40	584350.62
	NS	23400.00	24336.00	25309.44	26321.82	27374.69	28469.68
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	481254.00	505082.70	530093.47	556345.05	583899.09	612820.30
LONG RANGE PLANNING 0102	S	27713.00	29098.65	30553.58	32081.26	33685.32	35369.59
	NS	4400.00	4576.00	4759.04	4949.40	5147.38	5353.27
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	32113.00	33674.65	35312.62	37030.66	38832.70	40722.86
PUBLIC RELATIONS 0202	S	16050.00	16852.50	17695.12	18579.88	19508.88	20484.32
	NS	6500.00	6760.00	7030.40	7311.62	7604.08	7908.24
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	22550.00	23612.50	24725.52	25891.50	27112.96	28392.56
SOCIAL SERVICES 4404	S	0.00	0.00	0.00	0.00	0.00	0.00
	NS	0.00	0.00	0.00	0.00	0.00	0.00
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	0.00	0.00	0.00	0.00	0.00	0.00
INTERMEDIATE UNITS 4601	S	0.00	0.00	0.00	0.00	0.00	0.00
	NS	29500.00	30680.00	31907.20	33183.49	34510.83	35891.26
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	29500.00	30680.00	31907.20	33183.49	34510.83	35891.26
EARLY CHILDHOOD INSTRUC 1000	S	227461.00	250207.10	250775.75	263314.54	276480.27	290304.28
	NS	38000.00	39609.82	40820.57	42064.80	43343.26	44656.69
	CO	144800.00	150000.00	160000.00	175000.00	190000.00	200000.00
	T	410261.00	439816.92	451596.32	480379.34	509823.53	534960.97
ELEMENTARY INSTRUCTION 1200	S	1528458.00	1694654.45	1779397.67	1868367.55	1961785.93	2059875.23
	NS	91300.00	99969.79	104031.96	108281.13	112658.08	117259.47
	CO	759000.00	800000.00	850000.00	920000.00	1000000.00	1100000.00
	T	2378758.00	2594634.24	2733429.63	2896648.68	3074444.01	3277134.69
SECONDARY INSTRUCTION 1400	S	2224610.00	2511028.54	2722422.10	2948677.45	3177232.15	3435466.76
	NS	135500.00	151114.95	162117.15	173833.01	186226.75	199252.45
	CO	943475.00	1000000.00	1100000.00	1150000.00	1150000.00	1200000.00
	T	3303586.00	3662143.49	3984539.25	4272510.46	4513458.90	4834719.21
VOC-TECH INSTRUCT-CATAGORYVI	S	0.00	0.00	0.00	0.00	0.00	0.00
	NS	8250.00	8580.00	8923.20	9280.13	9651.33	10037.39
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	8250.00	8580.00	8923.20	9280.13	9651.33	10037.39
SPECIAL INSTRUCT-CATAGORYIII	S	93630.00	109235.00	114696.75	120431.59	126453.17	146053.41
	NS	10076.00	11103.40	11705.48	12337.96	13002.31	13700.07
	CO	60000.00	60000.00	65000.00	65000.00	70000.00	70000.00
	T	163706.00	180339.40	191402.23	197769.55	209455.48	229753.48
COMPENSATORY INST-CATAGORYIV	S	197962.00	207860.10	218253.10	229165.76	240624.05	252655.25
	NS	21300.00	22152.00	23038.08	23959.60	24917.99	25914.71
	CO	45968.00	48000.00	49000.00	50000.00	51000.00	52200.00
	T	265230.00	278012.10	290291.18	303125.36	316542.04	330769.96
GUIDANCE 4401	S	162212.00	170322.60	178838.73	187780.67	197169.70	207028.18
	NS	7500.00	8252.21	8709.19	9192.27	9698.43	10229.96

	CO	0.00	0.00	0.00	0.00	0.00	
	T	169712.00	178574.81	187547.92	196972.94	206868.13	217258.14
HEALTH SERVICES 4402	S	96461.00	101284.05	106348.25	111665.67	117248.95	123111.40
	NS	7900.00	8216.00	8544.64	8885.43	9241.88	9611.56
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	104361.00	109500.05	114892.89	120552.09	126490.83	132722.95
INSERVICE TRAINING 0303	S	0.00	0.00	0.00	0.00	0.00	0.00
	NS	10500.00	11553.09	12192.87	12869.18	13577.81	14321.94
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	10500.00	11553.09	12192.87	12869.18	13577.81	14321.94
LEGAL SERVICES 0203	S	0.00	0.00	0.00	0.00	0.00	0.00
	NS	2800.00	3080.83	3251.43	3431.78	3620.75	3819.18
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	2800.00	3080.83	3251.43	3431.78	3620.75	3819.18
PSYCHOLOGICAL 4403	S	39590.00	41569.50	43647.97	45830.37	48121.89	50527.99
	NS	0.00	0.00	0.00	0.00	0.00	0.00
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	39590.00	41569.50	43647.97	45830.37	48121.89	50527.99
BOARDS & COMMISSIONS 0103	S	856.00	898.80	943.74	990.93	1040.47	1092.50
	NS	62200.00	64688.00	67275.52	69966.54	72765.20	75675.81
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	63056.00	65586.80	68219.26	70957.47	73805.68	76768.31
IPBS 0104	S	10000.00	10500.00	11025.00	11576.25	12155.06	12762.82
	NS	1300.00	1352.00	1405.08	1462.32	1520.82	1581.65
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	11300.00	11852.00	12431.08	13038.57	13675.88	14344.46
PUPIL TRANSPORTATION 4605	S	200839.00	210880.95	221425.00	232496.25	244121.06	256327.11
	NS	52500.00	54600.00	56784.00	59055.36	61417.57	63874.28
	CO	10000.00	10000.00	10000.00	15000.00	15000.00	15000.00
	T	263339.00	275480.95	288209.00	306551.61	320538.63	335201.39
FOOD SERVICES 4606	S	11770.00	12358.50	12976.42	13625.25	14306.51	15021.83
	NS	2600.00	2860.77	3019.19	3186.65	3362.12	3546.38
	CO	10500.00	5000.00	2500.00	1000.00	500.00	0.00
	T	24870.00	20219.27	18495.61	17811.90	18168.63	18568.22
MAINTAINENCE &OPERAT 0603	S	289328.00	303794.40	318984.12	334933.33	351679.99	369263.99
	NS	289610.00	301194.40	313242.18	325771.86	338802.74	352354.85
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	578938.00	604988.80	632226.30	660705.19	690482.73	721618.84
EMPLOYEE BENEFITS 4603	S	0.00	0.00	0.00	0.00	0.00	0.00
	NS	0.00	0.00	0.00	0.00	0.00	0.00
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	0.00	0.00	0.00	0.00	0.00	0.00
INFO SYSTEMS DES OPERAT 0403	S	10000.00	10500.00	11025.00	11576.25	12155.06	12762.82
	NS	1000.00	1040.00	1081.60	1124.86	1169.86	1216.65
	CO	5100.00	10000.00	10000.00	25000.00	100000.00	100000.00
	T	16100.00	21540.00	22106.60	37701.11	113324.92	113979.47
TOTAL ABOVE	S	5594794.00	6161801.83	6543792.36	6961116.23	7390292.86	7872458.09
	NS	806136.00	855719.25	895149.22	936470.22	979613.88	1024675.48
	CO	1978944.00	2083000.00	2246500.00	2401000.00	2576500.00	2737200.00
	T	8379774.00	9100521.09	9685441.58	10298586.45	10946406.74	11634333.57
DEBT SERVICE		0.00	0.00	0.00	0.00	0.00	0.00
TOTAL COST		8379774.00	9100521.09	9685441.58	10298586.45	10946406.74	11634333.57

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DING A LING SCHOOL DISTRICT, SKIBO,PENNA ADJUSTED COSTS

MANPOWER (FULL-TIME EQUIVALENTS)

		CY	Y1	Y2	Y3	Y4	Y5
PROFESSIONAL ADMINISTRATION	P	4.00	4.00	4.00	4.00	4.00	4.00
TURNOVER RATE 2.0	H	.08	.08	.08	.08	.08	
ADMINISTRATIVE STAFF	P	25.00	25.00	25.00	25.00	25.00	25.00
TURNOVER RATE 5.0	H	1.25	1.25	1.25	1.25	1.25	
TEACHERS - EARLY CHILDHOOD	P	21.00	22.00	21.00	21.00	21.00	21.00
SEE INDICATOR 7	H	4.53	2.70	3.53	3.53	3.53	
TEACHERS - ELEMENTARY	P	143.00	151.00	151.00	151.00	151.00	151.00
SEE INDICATOR 7	H	32.02	25.37	25.37	25.37	25.37	
TEACHERS - SECONDARY	P	200.00	215.00	222.00	229.00	235.00	242.00
SEE INDICATOR 7	H	48.60	43.12	44.30	44.47	46.48	
TEACHERS - VOC.-TECH.	P	0.00	0.00	0.00	0.00	0.00	0.00
SEE INDICATOR 7	H	0.00	0.00	0.00	0.00	0.00	
TEACHERS - SPECIAL	P	9.00	10.00	10.00	10.00	10.00	11.00
SEE INDICATOR 7	H	2.51	1.68	1.68	1.68	2.68	
TEACHERS COMPENSATORY	P	18.00	18.00	18.00	18.00	18.00	18.00
SEE INDICATOR 7	H	3.02	3.02	3.02	3.02	3.02	
INSTRUCTIONAL SPECIALISTS	P	64.00	64.00	64.00	64.00	64.00	64.00
TURNOVER RATE 2.0	H	1.28	1.28	1.28	1.28	1.28	
MEDICAL PERSONNEL	P	9.00	9.00	9.00	9.00	9.00	9.00
TURNOVER RATE 2.0	H	.18	.18	.18	.18	.18	
PSYCHOLOGISTS	P	2.00	2.00	2.00	2.00	2.00	2.00
TURNOVER RATE 2.0	H	.04	.04	.04	.04	.04	
CLERICAL PERSONNEL	P	35.00	35.00	35.00	35.00	35.00	35.00
TURNOVER RATE 20.0	H	7.00	7.00	7.00	7.00	7.00	
GUIDANCE COUNSELORS	P	6.00	6.00	6.00	6.00	6.00	6.00
TURNOVER RATE 3.0	H	.18	.18	.18	.18	.18	
MAINTENANCE PERSONNEL	P	46.00	46.00	46.00	46.00	46.00	46.00
TURNOVER RATE 10.0	H	4.60	4.60	4.60	4.60	4.60	
TRANSPORTATION PERSONNEL	P	58.00	58.00	58.00	58.00	58.00	58.00
TURNOVER RATE 15.0	H	8.70	8.70	8.70	8.70	8.70	
FOOD SERVICE PERSONNEL	P	1.00	1.00	1.00	1.00	1.00	1.00
TURNOVER RATE 2.0	H	.02	.02	.02	.02	.02	
TECHNICIANS	P	4.00	4.00	4.00	4.00	4.00	4.00
TURNOVER RATE 2.0	H	.08	.08	.08	.08	.08	
TOTAL POSITIONS		645.00	670.00	676.00	683.00	689.00	697.00
TOTAL HIRES		114.10	99.30	101.31	101.48	104.49	

DING A LING SCHOOL DISTRICT, SKIBC,PENNA ADJUSTED COSTS

INDICATORS

	CY	Y1	Y2	Y3	Y4	Y5
EXCESS ENROLLMENT	1869.22	2408.22	2539.54	2673.80	2806.10	2938.40
TEACHERS/1000 WGT. PUPILS	38.51	38.76	38.79	38.89	38.91	39.10
SECONDARY COURSE OFFERINGS	150.00	150.00	153.00	153.00	153.00	150.00
INST.SPEC.,NURS.,PSYCH./1000 WGT. PUPILS	7.39	6.99	6.89	6.80	6.71	6.62
MATLS.,SUPPS.,LIB.BKS./WGT. PUPIL	24.43	25.41	27.49	30.92	36.17	44.00
NET EXPEND./WGT. PUPIL	777.17	797.80	836.73	876.67	918.53	962.57
PROF. STAFF TURNOVER ≥PCT.*	16.80	16.80	16.80	16.80	16.80	16.80
PROF. STAFF MA OR MORE ≥PCT.*	31.00	31.00	31.00	31.00	31.00	31.00
PCT. GRAD. CLASS ATTEND PHSE	65.00	65.00	70.00	70.00	70.00	75.00
DROPOUTS PCT. ENROLLMENT	.60	.60	.60	.60	.80	.80
LANGUAGE ACHIEVEMENT	.71	.71	.71	.71	.71	.71
MATHEMATICS ACHIEVEMENT	.12	.12	.12	.12	.12	.12

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SUBSIDIARY DATA

CLASSROOMS	307.00	307.00	307.00	307.00	307.00	307.00
MATLS..SUPPS..LIB.BKS.	263200.00	289597.58	317860.01	362867.03	430651.78	531412.55

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OPERATIONS OR CAPITAL IMPROVEMENT PROJECT NUMBER 1 70-1EARLY CHILD INSTRUCTIONAL MEDIA 1005

0 CLASSROOMS BEGINNING CY

CHANGE IN PROGRAM-EARLY CHILDHOOD INSTRUC 1000

MANPOWER	CY	Y1	Y2	Y3	Y4	Y5
TEACHERS - EARLY CHILDHOOD	.17	.17	.33	.33	.33	.40
INSTRUCTIONAL SPECIALISTS	0.00	0.00	0.00	0.00	0.00	0.00
TECHNICIANS	0.00	0.00	0.00	0.00	0.00	0.00

COSTS	CY	Y1	Y2	Y3	Y4	Y5
SALARY	1059.30	1112.26	2356.99	2474.84	2598.58	3277.49
NON-SALARY	5400.00	5616.00	5840.64	6074.27	6317.24	6569.93
CAPITAL OUTLAY	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL ABOVE	6459.30	6728.26	8197.63	8549.11	8915.82	9847.42

OPERATIONS OR CAPITAL IMPROVEMENT PROJECT NUMBER 2 70-1 ELEM ED INSTRUCTIONAL MEDIA 1205

0 CLASSROOMS BEGINNING CY

CHANGE IN PROGRAM-ELEMENTARY INSTRUCTION 1200

MANPOWER	CY	Y1	Y2	Y3	Y4	Y5
TEACHERS - ELEMENTARY	.33	.33	.33	.33	.33	.33
INSTRUCTIONAL SPECIALISTS	0.00	0.00	0.00	0.00	0.00	0.00
TECHNICIANS	0.00	0.00	0.00	0.00	0.00	0.00

COSTS	CY	Y1	Y2	Y3	Y4	Y5
SALARY	5344.65	5611.88	5892.48	6187.10	6496.46	6821.28
NON-SALARY	15000.00	15600.00	16224.00	16872.96	17547.88	18249.79
CAPITAL OUTLAY	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL ABOVE	20344.65	21211.88	22116.48	23060.06	24044.33	25071.07

DING A LING SCHOOL DISTRICT, SKIBO,PENNA TOTAL PROGRAM COSTS

OPERATIONS OR CAPITAL IMPROVEMENT PROJECT NUMBER 3 70-1 SECOND ED INSTRUCTIONAL MEDIA 1405

0 CLASSROOMS BEGINNING CY

CHANGE IN PROGRAM-SECONDARY INSTRUCTION 1400

MANPOWER	CY	Y1	Y2	Y3	Y4	Y5
TEACHERS - SECONDARY	.33	.33	.33	.33	.33	.33
INSTRUCTIONAL SPECIALISTS	0.00	0.00	0.00	0.00	0.00	0.00
TECHNICIANS	0.00	0.00	0.00	0.00	0.00	0.00

COSTS	CY	Y1	Y2	Y3	Y4	Y5
SALARY	5344.65	5611.88	5892.48	6187.10	6496.46	6821.28
NON-SALARY	15000.00	15600.00	16224.00	16872.96	17547.88	18249.79
CAPITAL OUTLAY	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL ABOVE	20344.65	21211.88	22116.48	23060.06	24044.33	25071.07

DING A LING SCHOOL DISTRICT, SKIBO,PENNA TOTAL PROGRAM COSTS

OPERATIONS OR CAPITAL IMPROVEMENT PROJECT NUMBER 4 70-1 SECONDARY ED EXTRACURRIC ACTI 1420

0 CLASSRCOMS BEGINNING CY

CHANGE IN PROGRAM-SECONDARY INSTRUCTION 1400

MANPOWER	CY	Y1	Y2	Y3	Y4	Y5
TEACHERS - SECONDARY	0.00	0.00	0.00	0.00	0.00	0.00
INSTRUCTIONAL SPECIALISTS	0.00	0.00	0.00	0.00	0.00	0.00
TECHNICIANS	0.00	0.00	0.00	0.00	0.00	0.00

COSTS	CY	Y1	Y2	Y3	Y4	Y5
SALARY	0.00	0.00	0.00	0.00	0.00	0.00
NON-SALARY	13000.00	13520.00	14060.80	14623.23	15208.16	15816.49
CAPITAL OUTLAY	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL ABOVE	13000.00	13520.00	14060.80	14623.23	15208.16	15816.49

PROGRAM COSTS

		CY	Y1	Y2	Y3	Y4	Y5
EXECUTIVE OFFICES 0101	S	457854.00	480746.70	504784.03	530023.24	556524.40	584350.62
	NS	23400.00	24336.00	25309.44	26321.82	27374.69	28469.68
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	481254.00	505082.70	530093.47	556345.05	583899.09	612820.30
LONG RANGE PLANNING 0102	S	27713.00	29098.65	30553.58	32081.26	33685.32	35369.59
	NS	4400.00	4576.00	4759.04	4949.40	5147.38	5353.27
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	32113.00	33674.65	35312.62	37030.66	38832.70	40722.86
PUBLIC RELATIONS 0202	S	16050.00	16852.50	17695.12	18579.88	19508.88	20484.32
	NS	6500.00	6760.00	7030.40	7311.62	7604.08	7908.24
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	22550.00	23612.50	24725.52	25891.50	27112.96	28392.56
SOCIAL SERVICES 4404	S	0.00	0.00	0.00	0.00	0.00	0.00
	NS	0.00	0.00	0.00	0.00	0.00	0.00
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	0.00	0.00	0.00	0.00	0.00	0.00
INTERMEDIATE UNITS 4601	S	0.00	0.00	0.00	0.00	0.00	0.00
	NS	29500.00	30680.00	31907.20	33183.49	34510.83	35891.26
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	29500.00	30680.00	31907.20	33183.49	34510.83	35891.26
EARLY CHILDHOOD INSTRUC 1000	S	228520.30	251319.36	253132.74	265789.38	279078.85	293581.77
	NS	43400.00	45225.82	46661.21	48139.07	49660.50	51226.62
	CO	144800.00	150000.00	160000.00	175000.00	190000.00	200000.00
	T	416720.30	446545.18	459793.95	488928.45	518739.35	544808.39
ELEMENTARY INSTRUCTION 1200	S	1533802.65	1700276.33	1785290.15	1874554.65	1968282.39	2066696.51
	NS	106300.00	115569.79	120255.96	125154.09	130205.96	135509.26
	CO	759000.00	800000.00	850000.00	920000.00	1000000.00	1100000.00
	T	2399102.65	2615846.12	2755546.11	2919708.74	3098488.34	3302205.76
SECONDARY INSTRUCTION 1400	S	2229954.65	2516640.42	2728314.58	2954864.55	3183728.60	3442288.04
	NS	163500.00	180234.95	192401.95	205329.20	218982.79	233318.73
	CO	943476.00	1000000.00	1100000.00	1150000.00	1150000.00	1200000.00
	T	3336930.65	3696875.37	4020716.53	4310193.76	4552711.39	4875606.77
VOC-TECH INSTRUCT-CATAGORYVI	S	0.00	0.00	0.00	0.00	0.00	0.00
	NS	8250.00	8580.00	8923.20	9280.13	9651.33	10037.39
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	8250.00	8580.00	8923.20	9280.13	9651.33	10037.39
SPECIAL INSTRUCT-CATAGORYIII	S	93630.00	109235.00	114696.75	120431.59	126453.17	146053.41
	NS	10076.00	11103.40	11705.48	12337.96	13002.31	13700.07
	CO	60000.00	60000.00	65000.00	65000.00	70000.00	70000.00
	T	163706.00	180338.40	191402.23	197769.55	209455.48	229753.48
COMPENSATORY INST-CATAGORYIV	S	197962.00	207860.10	218253.10	229165.76	240624.05	252655.25
	NS	21300.00	22152.00	23038.08	23959.60	24917.99	25914.71
	CO	45968.00	48000.00	49000.00	50000.00	51000.00	52200.00
	T	265230.00	278012.10	290291.18	303125.36	316542.04	330769.96
GUIDANCE 4401	S	162212.00	170322.60	178838.73	187780.67	197169.70	207028.18
	NS	7500.00	8252.21	8709.19	9192.27	9698.43	10229.96

	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	169712.00	178574.81	187547.92	196972.94	206868.13	217258.14
HEALTH SERVICES 4402	S	96461.00	101284.05	106348.25	111665.67	117248.95	123111.40
	NS	7900.00	8216.00	8544.64	8886.43	9241.88	9611.56
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	104361.00	109500.05	114892.89	120552.09	126490.83	132722.95
INSERVICE TRAINING 0303	S	0.00	0.00	0.00	0.00	0.00	0.00
	NS	10500.00	11553.09	12192.87	12869.18	13577.81	14321.94
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	10500.00	11553.09	12192.87	12869.18	13577.81	14321.94
LEGAL SERVICES 0203	S	0.00	0.00	0.00	0.00	0.00	0.00
	NS	2800.00	3080.83	3251.43	3431.78	3620.75	3819.18
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	2800.00	3080.83	3251.43	3431.78	3620.75	3819.18
PSYCHOLOGICAL 4403	S	39590.00	41569.50	43647.97	45830.37	48121.89	50527.99
	NS	0.00	0.00	0.00	0.00	0.00	0.00
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	39590.00	41569.50	43647.97	45830.37	48121.89	50527.99
BOARDS [COMMISSIONS 0103	S	856.00	898.80	943.74	990.93	1040.47	1092.50
	NS	62200.00	64688.00	67275.52	69966.54	72765.20	75675.81
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	63056.00	65586.80	68219.26	70957.47	73805.68	76768.31
PPBS 0104	S	10000.00	10500.00	11025.00	11576.25	12155.06	12762.82
	NS	1300.00	1352.00	1406.08	1462.32	1520.82	1581.65
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	11300.00	11852.00	12431.08	13038.57	13675.88	14344.46
PUPIL TRANSPORTATION 4605	S	200839.00	210880.95	221425.00	232496.25	244121.06	256327.11
	NS	52500.00	54600.00	56784.00	59055.36	61417.57	63874.28
	CO	10000.00	10000.00	10000.00	15000.00	15000.00	15000.00
	T	263339.00	275480.95	288209.00	306551.61	320538.63	335201.39
FOOD SERVICES 4606	S	11770.00	12358.50	12976.42	13625.25	14306.51	15021.83
	NS	2600.00	2860.77	3019.19	3186.65	3362.12	3546.38
	CO	10500.00	5000.00	2500.00	1000.00	500.00	0.00
	T	24870.00	20219.27	18495.61	17811.90	18168.63	18568.22
MAINTAINENCE [OPERAT 0603	S	289328.00	303794.40	318984.12	334933.33	351679.99	369263.99
	NS	289610.00	301194.40	313242.18	325771.86	338802.74	352354.85
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	578938.00	604988.80	632226.30	660705.19	690482.73	721618.84
EMPLOYEE BENEFITS 4603	S	0.00	0.00	0.00	0.00	0.00	0.00
	NS	0.00	0.00	0.00	0.00	0.00	0.00
	CO	0.00	0.00	0.00	0.00	0.00	0.00
	T	0.00	0.00	0.00	0.00	0.00	0.00
INFO SYSTEMS DES OPERAT 0403	S	10000.00	10500.00	11025.00	11576.25	12155.06	12762.82
	NS	1000.00	1040.00	1081.60	1124.86	1169.86	1216.65
	CO	5100.00	10000.00	10000.00	25000.00	100000.00	100000.00
	T	16100.00	21540.00	22106.60	37701.11	113324.92	113979.47
TOTAL ABOVE	S	5606542.60	6174137.86	6557034.31	6975965.27	7405884.35	7889378.14
	NS	854536.00	906055.25	947498.66	990913.64	1036235.04	1083561.48
	CO	1978844.00	2083000.00	2246500.00	2401000.00	2576500.00	2737200.00
	T	8439922.60	9163193.12	9751932.96	10367878.90	11018619.39	11710139.62
DEBT SERVICE		0.00	0.00	0.00	0.00	0.00	0.00
TOTAL COST		8439922.60	9163193.12	9751932.96	10367878.90	11018619.39	11710139.62

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DING A LING SCHOOL DISTRICT, SKIBO,PENNA TOTAL PROGRAM COSTS

MANPOWER (FULL-TIME EQUIVALENTS)

		CY	Y1	Y2	Y3	Y4	Y5
PROFESSIONAL ADMINISTRATION	P	4.00	4.00	4.00	4.00	4.00	4.00
TURNOVER RATE 2.0	H	.08	.08	.08	.08	.08	
ADMINISTRATIVE STAFF	P	25.00	25.00	25.00	25.00	25.00	25.00
TURNOVER RATE 5.0	H	1.25	1.25	1.25	1.25	1.25	
TEACHERS - EARLY CHILDHOOD	P	21.16	22.16	21.33	21.33	21.33	21.40
SEE INDICATOR 7	H	4.56	2.89	3.58	3.58	3.65	
TEACHERS - ELEMENTARY	P	143.33	151.33	151.33	151.33	151.33	151.33
SEE INDICATOR 7	H	32.08	25.42	25.42	25.42	25.42	
TEACHERS - SECONDARY	P	200.33	215.33	222.33	229.33	235.33	242.33
SEE INDICATOR 7	H	48.66	43.18	44.35	44.53	46.54	
TEACHERS - VOC.-TECH.	P	0.00	0.00	0.00	0.00	0.00	0.00
SEE INDICATOR 7	H	0.00	0.00	0.00	0.00	0.00	
TEACHERS - SPECIAL	P	9.00	10.00	10.00	10.00	10.00	11.00
SEE INDICATOR 7	H	2.51	1.68	1.68	1.68	2.68	
TEACHERS COMPENSATORY	P	18.00	18.00	18.00	18.00	18.00	18.00
SEE INDICATOR 7	H	3.02	3.02	3.02	3.02	3.02	
INSTRUCTIONAL SPECIALISTS	P	64.00	64.00	64.00	64.00	64.00	64.00
TURNOVER RATE 2.0	H	1.28	1.28	1.28	1.28	1.28	
MEDICAL PERSONNEL	P	9.00	9.00	9.00	9.00	9.00	9.00
TURNOVER RATE 2.0	H	.18	.18	.18	.18	.18	
PSYCHOLOGISTS	P	2.00	2.00	2.00	2.00	2.00	2.00
TURNOVER RATE 2.0	H	.04	.04	.04	.04	.04	
CLERICAL PERSONNEL	P	35.00	35.00	35.00	35.00	35.00	35.00
TURNOVER RATE 20.0	H	7.00	7.00	7.00	7.00	7.00	
GUIDANCE COUNSELORS	P	6.00	6.00	6.00	6.00	6.00	6.00
TURNOVER RATE 3.0	H	.18	.18	.18	.18	.18	
MAINTENANCE PERSONNEL	P	46.00	46.00	46.00	46.00	46.00	46.00
TURNOVER RATE 10.0	H	4.60	4.60	4.60	4.60	4.60	
TRANSPORTATION PERSONNEL	P	58.00	58.00	58.00	58.00	58.00	58.00
TURNOVER RATE 15.0	H	8.70	8.70	8.70	8.70	8.70	
FOOD SERVICE PERSONNEL	P	1.00	1.00	1.00	1.00	1.00	1.00
TURNOVER RATE 2.0	H	.02	.02	.02	.02	.02	
TECHNICIANS	P	4.00	4.00	4.00	4.00	4.00	4.00
TURNOVER RATE 2.0	H	.08	.08	.08	.08	.08	
TOTAL POSITIONS		645.83	670.83	677.00	684.00	690.00	698.07
TOTAL HIRES		114.24	99.61	101.47	101.65	104.72	

INDICATORS

	CY	Y1	Y2	Y3	Y4	Y5
EXCESS ENROLLMENT	1869.22	2408.22	2539.54	2673.80	2806.10	2938.40
TEACHERS/1000 WGT. PUPILS	38.60	38.84	38.88	38.98	39.00	39.20
SECONDARY COURSE OFFERINGS	150.00	150.00	153.00	153.00	153.00	150.00
INST.SPEC.,NURS.,PSYCH./1000 WGT. PUPILS	7.39	6.99	6.89	6.80	6.71	6.62
MATLS.,SUPPS.,LIB.BKS./WGT. PUPIL	24.43	25.41	27.49	30.92	36.17	44.00
NET EXPEND./WGT. PUPIL	782.76	803.30	842.47	882.58	924.60	968.85
PROF. STAFF TURNOVER ≥PCT.+	16.80	16.80	16.80	16.80	16.80	16.80
PROF. STAFF MA OR MORE ≥PCT.+	31.00	31.00	31.00	31.00	31.00	31.00
PCT. GRAD. CLASS ATTEND PHSE	65.00	65.00	70.00	70.00	70.00	75.00
DROPOUTS PCT. ENROLLMENT	.60	.60	.60	.60	.80	.80
LANGUAGE ACHIEVEMENT	.71	.71	.71	.71	.71	.71
MATHEMATICS ACHIEVEMENT	.12	.12	.12	.12	.12	.12

SUBSIDIARY DATA

CLASSROOMS	307.00	307.00	307.00	307.00	307.00	307.00
MATLS.,SUPPS.,LIB.BKS.	263200.00	289597.58	317860.01	362867.03	430651.78	531412.55

REVENUE FORECAST

REAL ESTATE TAX

		Y1	Y2	Y3	Y4	Y5
DIST. REAL PROPERTY MKT. VALUE		190777400.00	195546835.00	200435505.00	205446392.00	210582551.00
ASSESSMENT RATIO		.320	.320	.320	.320	.320
TAXABLE ASSESSED VALUE		61048768.00	62574987.20	64139361.60	65742845.44	67386416.32
REVENUE/MILL		61048.77	62574.99	64139.36	65742.85	67386.42
CY TAX RATE (MILLS)	65.00					
ASSESSED TAX		3968169.92	4067374.17	4169058.50	4273284.95	4380117.06
COLLECTION PERCENT	99.16					
GROSS ASSESSED TAX		3934837.29	4033208.22	4134038.41	4237389.36	4343324.08
ADJUSTMENTS		-0.00	-0.00	-0.00	-0.00	-0.00
TOTAL REAL ESTATE TAX AT CY RATE		3934837.29	4033208.22	4134038.41	4237389.36	4343324.08

REVENUE FORECAST

BASIC INSTRUCTIONAL SUBSIDY

	Y1	Y2	Y3	Y4	Y5
DIST. REAL PROPERTY MKT. VALUE	190777400.00	195546835.00	200435505.00	205446392.00	210582551.00
WT. AVRGE. DAILY MBRSHP.	11213.59	11397.52	11585.09	11770.70	11955.61
DIST. PROPERTY MKT. VALUE/PUPIL	17013.05	17156.97	17301.16	17454.05	17613.70
STATE PROPERTY MKT. VALUE/PUPIL	16685.00	17105.00	17536.00	17978.00	18431.00
DIST./STATE RATIO	1.019661	1.003038	.986608	.970856	.955656
DISTRICT SHARE	.509831	.501519	.493304	.485428	.477828
AID RATIO	.490169	.498481	.506696	.514572	.522172
STATE SUBSIDY/PUPIL	550.00	550.00	550.00	550.00	550.00
DISTRICT FOUNDATION	6167475.16	6268634.68	6371799.28	6473885.88	6575584.40
STATE SHARE OF DIST. FOUNDATION	3023106.87	3124794.89	3228564.57	3331280.60	3433584.43
ADJUSTMENTS	-0.00	-0.00	-0.00	-0.00	-0.00
NET STATE INSTRUCTIONAL SUBSIDY	3023106.87	3124794.89	3228564.57	3331280.60	3433584.43

REVENUE FORECAST

TOTAL REVENUE

	Y1	Y2	Y3	Y4	Y5
TOTAL REAL ESTATE TAX AT CY RATE	3934837.29	4033208.22	4134038.41	4237389.36	4343324.08
NET STATE INSTRUCTIONAL SUBSIDY	3023106.87	3124794.89	3228564.57	3331280.60	3433584.43
TOTAL OTHER REVENUE	2437700.00	2559585.00	2623575.00	2754753.00	2892491.00
TOTAL REVENUE AT CY R.E. RATE	9395644.16	9717588.11	9986177.98	10323422.96	10669399.50

REVENUE FEASIBILITY

	Y1	Y2	Y3	Y4	Y5
TOTAL REVENUE AT CY REAL ESTATE TAX	9395644.16	9717588.11	9986177.98	10323422.96	10669399.50
SURPLUS FROM PRIOR YEAR	0.00	232451.04	198106.19	0.00	0.00
TOTAL COST	9163193.12	9751932.96	10367878.90	11018619.39	11710139.62
SURPLUS(+),DEFICIT(-) AT CY TAX RATE	232451.04	198106.19	-183594.73	-695196.43	-1040740.11

	CY	Y1	Y2	Y3	Y4	Y5
REAL ESTATE TAX RATE (MILLS)	65.00	65.00	65.00	67.89	75.66	80.58
YEAR TO YEAR CHANGE		0.00	0.00	2.89	7.78	4.91

	Y1	Y2	Y3	Y4	Y5
TOTAL REVENUE AT Y1-Y5 R.E. TAX RATES	9395644.16	9717588.11	10169772.71	11018619.39	11710139.62
SURPLUS FROM PRIOR YEAR	0.00	232451.04	198106.19	0.00	0.00
TOTAL COST	9163193.12	9751932.96	10367878.90	11018619.39	11710139.62
SURPLUS AT Y1-Y5 R.E. TAX RATES	232451.04	198106.19	0.00	0.00	0.00

SUBSIDIARY DATA

		Y1	Y2	Y3	Y4	Y5
REVENUE/MILL		61048.77	62574.99	64139.36	65742.85	67386.42
COLLECT PERCENTAGE	99.16					
COLLECTED REVENUF/MILL		60535.96	62049.36	63600.59	65190.61	66820.37

OPERATIONS PROJECT ALTERNATIVE NUMBER 1 READING IMPROVEMENT

CHANGE IN PROGRAM-ELEMENTARY INSTRUCTION

MANPOWER	Y1	Y2	Y3	Y4	Y5
TEACHERS - ELEMENTARY	1.00	1.00	1.00	1.00	1.00

COSTS	Y1	Y2	Y3	Y4	Y5
SALARY	10000.00	10700.00	11448.98	12250.40	13107.92
NON-SALARY	0.0	0.0	0.0	0.0	0.0
CAPITAL OUTLAY	0.0	0.0	0.0	0.0	0.0
TOTAL ABOVE	10000.00	10700.00	11448.98	12250.40	13107.92

CHANGE IN PROGRAM-INSTRUCTIONAL SUPPORT SER.

MANPOWER	Y1	Y2	Y3	Y4	Y5
PRINCIPALS	0.0	0.0	0.0	0.0	0.0
INSTRUCTIONAL SPECIALISTS	3.00	3.00	3.00	3.00	3.00
CLERICAL PERSONNEL	0.0	0.0	0.0	0.0	0.0

COSTS	Y1	Y2	Y3	Y4	Y5
SALARY	18000.00	19259.99	20608.16	22050.73	23594.25
NON-SALARY	0.0	0.0	0.0	0.0	0.0
MATLS..SUPPS..LIB.BKS.	3000.00	3090.00	3083.00	3278.00	3376.00
CAPITAL OUTLAY	12000.00	0.0	0.0	0.0	0.0
TOTAL ABOVE	33000.00	22349.99	23691.16	25328.73	26970.25

INDICATOR CHANGES

	Y1	Y2	Y3	Y4	Y5
SECONDARY COURSE OFFERINGS	0.0	0.0	0.0	0.0	0.0
PROF. STAFF TURNOVER (PCT.)	0.0	0.0	0.0	0.0	0.0
PROF. STAFF MA OR MORE (PCT.)	0.50	0.50	0.50	0.50	0.50
PCT. GRAD. CLASS ATTEND PHSE	0.0	0.0	0.0	0.0	0.0
DROPOUTS PCT. ENROLLMENT	0.0	0.0	0.0	0.0	0.0
LANGUAGE ACHIEVEMENT	0.16	0.16	0.16	0.16	0.16
MATHEMATICS ACHIEVEMENT	0.12	0.12	0.12	0.12	0.12

* The following print-out was taken from original pilots in the project and are not related to the print-out in the simulation.

CAPITAL IMPROVEMENT PROJECT ALTERNATIVE NUMBER 1 LITTLE ORANGE SCHOOL ADDITION

13. CLASSROOMS BEGINNING Y3

	Y3	Y4	Y5
ADDITIONAL REVENUE	0.0	0.0	0.0

CHANGE IN PROGRAM-INSTRUCTIONAL SUPPORT SER.

MANPOWER	Y3	Y4	Y5
PRINCIPALS	0.0	0.0	0.0
INSTRUCTIONAL SPECIALISTS	1.00	1.00	1.00
CLERICAL PERSONNEL	0.0	0.0	0.0

COSTS	Y3	Y4	Y5
SALARY	8800.00	9416.00	10075.11
NON-SALARY	0.0	0.0	0.0
MATLS.,SUPPS.,LIB.BKS.	5000.00	0.0	0.0
CAPITAL OUTLAY	0.0	0.0	0.0
TOTAL ABOVE	13800.00	9416.00	10075.11

CHANGE IN PROGRAM-FACILITIES

MANPOWER	Y3	Y4	Y5
OPERATIONS PERSONNEL	2.00	2.00	2.00
MAINTENANCE PERSONNEL	0.0	0.0	0.0

COSTS	Y3	Y4	Y5
SALARY	5000.00	5350.00	5724.49
NON-SALARY	4100.00	4223.00	4349.68
CAPITAL OUTLAY	0.0	0.0	0.0
DEBT SERVICE	0.0	0.0	0.0
TOTAL ABOVE	9100.00	9572.99	10074.17

INDICATOR CHANGES

	Y3	Y4	Y5
SECONDARY COURSE OFFERINGS	3.00	3.00	3.00
PROF. STAFF TURNOVER (PCT.)	0.0	0.0	0.0
PROF. STAFF MA OR MORE (PCT.)	0.0	0.0	0.0
PCT. GRAD. CLASS ATTEND PHSE	0.0	0.0	0.0
DROPOUTS PCT. ENROLLMENT	0.0	-0.20	-0.20
LANGUAGE ACHIEVEMENT	0.0	0.16	0.16
MATHEMATICS ACHIEVEMENT	0.0	0.12	0.12

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INCLUDES

OPERATIONS PROJECT ALTERNATIVE NUMBER 1 READING IMPROVEMENT

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INCLUDES

CAPITAL IMPROVEMENT PROJECT ALTERNATIVE NUMBER 1 LITTLE ORANGE SCHOOL ADDITION

PROGRAM COSTS **

		CY	Y1	Y2	Y3	Y4	Y5
POLICY AND EXECUTIVE	S	33170.00	35491.89	37976.28	40634.59	43478.97	46522.48
	NS	0.0	0.0	0.0	0.0	0.0	0.0
	CO	0.0	0.0	0.0	0.0	0.0	0.0
	T	33170.00	35491.89	37976.28	40634.59	43478.97	46522.48
COMPREHENSIVE PLANNING	S	43360.00	46395.18	49642.79	53117.75	56835.94	60814.43
	NS	0.0	0.0	0.0	0.0	0.0	0.0
	CO	0.0	0.0	0.0	0.0	0.0	0.0
	T	43360.00	46395.18	49642.79	53117.75	56835.94	60814.43
INFORMATION AND LIAISON	S	26140.00	27969.79	29927.64	32022.55	34264.10	36662.57
	NS	0.0	0.0	0.0	0.0	0.0	0.0
	CO	0.0	0.0	0.0	0.0	0.0	0.0
	T	26140.00	27969.79	29927.64	32022.55	34264.10	36662.57
COMMUNITY SERVICES	S	55583.00	59473.79	63636.83	68091.37	72857.75	77957.75
	NS	11920.00	12277.59	12645.91	13025.28	13416.02	13818.50
	CO	0.0	0.0	0.0	0.0	0.0	0.0
	T	67503.00	71751.37	76282.75	81116.62	86273.75	91776.25
COORDINATE SUPPORT SERVICES	S	68080.00	72845.56	77944.62	83400.75	89238.69	95485.37
	NS	92049.00	94810.44	97654.62	100584.19	103601.62	106709.62
	CO	0.0	0.0	0.0	0.0	0.0	0.0
	T	160129.00	167656.00	175599.25	183984.94	192840.31	202195.00
EARLY CHILDHOOD INSTRUCTION	S	235946.00	277505.19	285612.50	294585.69	312939.31	324238.37
	NS	20633.00	24204.14	25339.58	26200.12	27503.07	28690.26
	CO	0.0	0.0	0.0	0.0	0.0	0.0
	T	256579.00	301709.31	310952.06	320785.75	340442.37	352928.62
ELEMENTARY INSTRUCTION	S	2094176.00	2363870.00	2515063.00	2672185.00	2843028.00	3028232.00
	NS	136125.00	150173.81	159009.37	168141.37	177652.75	187662.12
	CO	0.0	0.0	0.0	0.0	0.0	0.0
	T	2230301.00	2514043.00	2674072.00	2840326.00	3020680.00	3215894.00
SECONDARY INSTRUCTION	S	2642023.00	2942491.00	3188939.00	3467176.00	3775790.00	4111755.00
	NS	182729.00	198334.06	215024.37	233438.19	252728.37	272857.87
	CO	0.0	0.0	0.0	0.0	0.0	0.0
	T	2824752.00	3140825.00	3403963.00	3700614.00	4032518.00	4384612.00
VOC.-TECH. INSTRUCTION	S	0.0	0.0	0.0	0.0	0.0	0.0
	NS	112626.00	122191.62	132628.06	143990.87	155916.19	168427.44
	CO	0.0	0.0	0.0	0.0	0.0	0.0
	T	112626.00	122191.62	132628.06	143990.87	155916.19	168427.44
SPECIAL INSTRUCTION	S	134060.00	187664.81	201524.75	208871.19	225439.69	243735.75
	NS	7175.00	7858.79	8434.56	9037.80	9665.65	10331.29
	CO	0.0	13000.00	0.0	0.0	0.0	0.0
	T	141235.00	208523.55	209959.31	217908.94	235105.31	254067.00
CONTINUING INSTRUCTION	S	0.0	0.0	0.0	0.0	0.0	0.0
	NS	1450.00	1905.50	1962.66	2021.54	2082.19	2144.65
	CO	0.0	0.0	0.0	0.0	0.0	0.0
	T	1450.00	1905.50	1962.66	2021.54	2082.19	2144.65
INSTRUCTIONAL SUPPORT SER.	S	1583407.00	1790245.00	62.00	2158647.00	2329534.00	2507711.37
	NS	228765.00	239835.19	13837.62	108881.99	0.0	0.0

	CO	85390.00	97390.00	85390.00	85390.00	85390.00	85390.00
	T	1917562.00	2157470.00	2284604.00	2452498.00	2612887.00	2789173.00
NURSING	S	161655.00	172970.75	185078.50	198033.87	211896.06	226728.69
	NS	0.0	0.0	0.0	0.0	0.0	0.0
	CO	0.0	0.0	0.0	0.0	0.0	0.0
	T	161655.00	172970.75	185078.50	198033.87	211896.06	226728.69
MEDICAL	S	9670.00	11023.72	12261.58	13634.09	15146.23	16798.87
	NS	7184.00	7878.15	8441.77	9043.87	9678.94	10341.17
	CO	0.0	0.0	0.0	0.0	0.0	0.0
	T	16854.00	18901.87	20703.35	22677.96	24825.17	27140.04
DENTAL	S	3250.00	3704.97	4121.00	4582.29	5090.51	5645.95
	NS	348.00	381.63	408.93	438.09	468.86	500.94
	CO	0.0	0.0	0.0	0.0	0.0	0.0
	T	3598.00	4086.60	4529.93	5020.39	5559.37	6146.88
PSYCHOLOGICAL	S	2000.00	14640.00	15664.79	16761.30	17934.59	19189.99
	NS	0.0	5000.00	5150.00	5304.49	5463.62	5627.52
	CO	0.0	0.0	0.0	0.0	0.0	0.0
	T	2000.00	19640.00	20814.79	22065.80	23398.21	24817.52
HEALTH SUPPORT SERVICES	S	3034.00	3246.38	3473.62	3716.77	3976.94	4255.32
	NS	8362.00	8612.86	8871.23	9137.36	9411.47	9693.82
	CO	1267.00	1267.00	1267.00	1267.00	1267.00	1267.00
	T	12663.00	13126.23	13611.86	14124.13	14655.41	15216.14
GENERAL SERVICES	S	92459.00	98931.06	105856.12	113266.00	121194.50	129678.06
	NS	20110.00	20713.29	21334.67	21974.70	22633.91	23312.92
	CO	0.0	0.0	0.0	0.0	0.0	0.0
	T	112569.00	119644.31	127190.75	135240.69	143828.37	152990.94
PUPIL TRANSPORTATION	S	327513.00	350438.44	374968.81	408133.87	458908.00	506871.25
	NS	127878.00	131714.25	135665.56	142230.69	154207.87	164128.50
	CO	750.00	750.00	750.00	8750.00	24750.00	16750.00
	T	456141.00	482902.69	511384.37	559114.56	637865.87	687749.75
FOOD SERVICES	S	0.0	0.0	0.0	0.0	0.0	0.0
	NS	37400.00	41013.72	43947.96	47082.51	50388.68	53836.29
	CO	8077.00	8077.00	8077.00	8077.00	8077.00	8077.00
	T	45477.00	49090.72	52024.96	55159.51	58465.68	61913.29
FACILITIES	S	711992.00	774481.19	828693.75	891701.81	954120.00	1020907.94
	NS	497874.00	525290.06	540028.06	559308.50	575067.25	591299.12
	CO	32834.00	32834.00	32834.00	32834.00	32834.00	32834.00
	T	1242700.00	1332605.00	1401555.00	1483844.00	1562021.00	1645041.00
FIXED CHARGES	S	632710.00	708982.12	759803.00	815972.12	878868.56	945077.31
	NS	54247.00	54247.00	54247.00	54247.00	54247.00	54247.00
	CO	0.0	0.0	0.0	0.0	0.0	0.0
	T	686957.00	763229.12	814050.00	870219.12	933115.56	999324.31
BUSINESS SUPPORT SERVICES	S	51310.00	54901.63	58744.73	62856.82	67256.69	71964.62
	NS	39375.00	40556.24	41772.89	43026.04	44316.77	45646.27
	CO	10847.00	10847.00	10847.00	10847.00	10847.00	10847.00
	T	101532.00	106304.87	111364.56	116729.81	122420.44	128457.87
TOTAL ABOVE	S	8921538.00	9997266.00	10714484.00	11507185.00	12394793.00	13329226.00
	NS	1596650.00	1716397.00	1796222.00	1896892.00	1993411.00	2096342.00
	CO	139165.00	164165.00	139165.00	147165.00	163165.00	155165.00
	T	10657353.00	11878426.00	12649870.00	13551240.00	14551374.00	15580737.00

DEBT SERVICE	1639464.00	1639464.00	1639464.00	1639464.00	1639464.00	1639464.00
TOTAL COST	12296817.00	13517890.00	14289334.00	15190704.00	16190838.00	17220192.00

** The program names above and the manpower types below are from the program structure of the original version of the PPBS. It appears here for two reasons:

1. They were used in the original pilot schools
2. They were retained for the information of the user as alternate programs.

MANPOWER (FULL-TIME EQUIVALENTS)

		CY	Y1	Y2	Y3	Y4	Y5
PROFESSIONAL ADMINISTRATION	P	9.00	9.00	9.00	9.00	9.00	9.00
TURNOVER RATE 2.0	H	0.18	0.18	0.18	0.18	0.18	
PRINCIPALS	P	25.00	25.00	25.00	25.00	25.00	25.00
TURNOVER RATE 5.0	H	1.25	1.25	1.25	1.25	1.25	
TEACHERS - EARLY CHILDHOOD	P	24.00	28.00	28.00	28.00	29.00	29.00
SEE INDICATOR 7	H	7.36	3.92	3.92	4.92	4.06	
TEACHERS - ELEMENTARY	P	239.00	257.00	265.00	272.00	279.00	286.00
SEE INDICATOR 7	H	51.46	43.98	44.10	45.08	46.06	
TEACHERS - SECONDARY	P	307.00	324.00	341.00	359.00	378.00	396.00
SEE INDICATOR 7	H	59.58	62.36	65.74	69.26	70.92	
TEACHERS - VOC.-TECH.	P	0.0	0.0	0.0	0.0	0.0	0.0
SEE INDICATOR 7	H	0.0	0.0	0.0	0.0	0.0	
TEACHERS - SPECIAL	P	13.00	18.00	19.00	19.00	20.00	21.00
SEE INDICATOR 7	H	6.82	3.52	2.66	3.66	3.80	
TEACHERS - CONTINUING	P	0.0	0.0	0.0	0.0	0.0	0.0
SEE INDICATOR 7	H	0.0	0.0	0.0	0.0	0.0	
INSTRUCTIONAL SPECIALISTS	P	104.00	113.00	113.00	114.00	114.00	114.00
TURNOVER RATE 2.0	H	11.08	2.26	3.25	2.28	2.28	
NURSES	P	18.00	19.00	18.00	18.00	18.00	18.00
TURNOVER RATE 2.0	H	0.36	0.36	0.36	0.36	0.36	
PSYCHOLOGISTS	P	0.0	1.00	1.00	1.00	1.00	1.00
TURNOVER RATE 2.0	H	1.00	0.02	0.02	0.02	0.02	
CLERICAL PERSONNEL	P	75.00	79.00	79.00	79.00	79.00	79.00
TURNOVER RATE 20.0	H	19.00	15.80	15.80	15.80	15.80	
OPERATIONS PERSONNEL	P	134.00	138.50	138.50	140.50	140.50	140.50
TURNOVER RATE 2.0	H	7.18	2.77	4.77	2.81	2.81	
MAINTENANCE PERSONNEL	P	21.00	21.00	21.00	21.00	21.00	21.00
TURNOVER RATE 2.0	H	0.42	0.42	0.42	0.42	0.42	
BUS DRIVERS	P	58.00	58.00	58.00	59.00	62.00	64.00
TURNOVER RATE 15.0	H	8.70	8.70	9.70	11.85	11.30	
FOOD SERVICE PERSONNEL	P	0.0	0.0	0.0	0.0	0.0	0.0
TURNOVER RATE 2.0	H	0.0	0.0	0.0	0.0	0.0	
ADMINISTRATIVE STAFF	P	7.00	7.00	7.00	7.00	7.00	7.00
TURNOVER RATE 2.0	H	0.14	0.14	0.14	0.14	0.14	
TOTAL POSITIONS		1034.00	1096.50	1122.50	1151.50	1182.50	1210.50
TOTAL HIRES		174.53	145.68	152.32	158.03	159.40	

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INDICATORS

	CY	Y1	Y2	Y3	Y4	Y5
EXCESS ENROLLMENT	1601.70	1434.29	1961.47	2178.49	2728.44	3274.42
TEACHERS/1000 WGT. PUPILS	44.09	44.50	44.59	44.55	44.68	44.69
SECONDARY COURSE OFFERINGS	167.00	167.00	167.00	170.00	170.00	170.00
INST.SPEC.,NURS.,PSYCH./1000 WGT. PUPILS	9.23	9.37	9.01	8.74	8.42	8.12
MATLS.,SUPPS.,LIB.BKS./WGT. PUPIL	8.39	9.17	9.36	10.51	11.47	13.26
NET EXPEND./WGT. PUPIL	863.22	891.40	905.51	925.32	949.03	972.92
PROF. STAFF TURNOVER (PCT.)	14.00	14.00	14.00	14.00	14.00	14.00
PROF. STAFF MA OR MORE (PCT.)	19.00	19.50	19.50	19.50	19.50	19.50
PCT. GRAD. CLASS ATTEND PHSE	67.10	67.10	67.10	67.10	67.10	67.10
DROPOUTS PCT. ENROLLMENT	1.20	1.20	1.20	1.20	1.00	1.00
LANGUAGE ACHIEVEMENT	1.76	1.92	1.92	1.92	2.08	2.08
MATHEMATICS ACHIEVEMENT	1.35	1.47	1.47	1.47	1.59	1.59

SUBSIDIARY DATA

CLASSROOMS	442.00	482.00	482.00	495.00	495.00	495.00
MATLS.,SUPPS.,LIB.BKS.	118381.00	137819.44	146370.25	170930.50	193721.06	232386.25

INDICATOR GAPS

		CY	Y1	Y2	Y3	Y4	Y5
EXCESS ENROLLMENT	D	700.00	700.00	700.00	700.00	700.00	700.00
	A	1601.70	1434.29	1961.47	2178.49	2728.44	3274.42
	G	-901.70	-734.29	-1261.47	-1478.49	-2028.44	-2574.42
TEACHERS/1000 WGT. PUPILS	D	50.00	50.00	50.00	50.00	50.00	50.00
	A	44.09	44.50	44.59	44.55	44.68	44.69
	G	5.91	5.50	5.41	5.45	5.32	5.31
SECONDARY COURSE OFFERINGS	D	180.00	180.00	180.00	180.00	180.00	180.00
	A	167.00	167.00	167.00	170.00	170.00	170.00
	G	13.00	13.00	13.00	10.00	10.00	10.00
INST.SPEC.,NURS.,PSYCH./1000 WGT. PUPILS	D	10.00	10.00	10.00	10.00	10.00	10.00
	A	9.23	9.37	9.01	8.74	8.42	8.12
	G	0.77	0.63	0.99	1.26	1.58	1.88
MATLS.,SUPPS.,LIB.BKS./WGT. PUPIL	D	12.00	12.00	12.00	12.00	12.00	12.00
	A	8.39	9.17	9.36	10.51	11.47	13.26
	G	3.61	2.83	2.64	1.49	0.53	-1.26
NET EXPEND./WGT. PUPIL	D	900.00	900.00	900.00	900.00	900.00	900.00
	A	863.22	891.40	905.51	925.32	949.03	972.92
	G	36.78	8.60	-5.51	-25.32	-49.03	-72.92
PROF. STAFF TURNOVER (PCT.)	D	10.00	10.00	10.00	10.00	10.00	10.00
	A	14.00	14.00	14.00	14.00	14.00	14.00
	G	-4.00	-4.00	-4.00	-4.00	-4.00	-4.00
PROF. STAFF MA OR MORE (PCT.)	D	30.00	30.00	30.00	30.00	30.00	30.00
	A	19.00	19.50	19.50	19.50	19.50	19.50
	G	11.00	10.50	10.50	10.50	10.50	10.50
PCT. GRAD. CLASS ATTEND PHSE	D	70.00	70.00	70.00	70.00	70.00	70.00
	A	67.10	67.10	67.10	67.10	67.10	67.10
	G	2.90	2.90	2.90	2.90	2.90	2.90
DROPOUTS PCT. ENROLLMENT	D	1.00	1.00	1.00	1.00	1.00	1.00
	A	1.20	1.20	1.20	1.20	1.00	1.00
	G	-0.20	-0.20	-0.20	-0.20	0.00	0.00
LANGUAGE ACHIEVEMENT	D	2.00	2.00	2.00	2.00	2.00	2.00
	A	1.76	1.92	1.92	1.92	2.08	2.08
	G	0.24	0.08	0.08	0.08	-0.08	-0.08
MATHEMATICS ACHIEVEMENT	D	1.75	1.75	1.75	1.75	1.75	1.75
	A	1.35	1.47	1.47	1.47	1.59	1.59
	G	0.40	0.28	0.28	0.28	0.16	0.16

REVENUE FEASIBILITY

	Y1	Y2	Y3	Y4	Y5
TOTAL REVENUE AT CY REAL ESTATE TAX	13336338.00	13974209.00	14525797.00	15100706.00	15636957.00
SURPLUS FROM PRIOR YEAR	0.0	0.0	0.0	0.0	0.0
TOTAL COST	13517890.00	14289334.00	15190704.00	16190838.00	17220192.00
SURPLUS(+),DEFICIT(-) AT CY TAX RATE	-181552.00	-315125.00	-664907.00	-1090132.00	-1583235.00

	CY	Y1	Y2	Y3	Y4	Y5
REAL ESTATE TAX RATE (MILLS)	89.50	91.29	92.49	95.58	99.09	103.05
YEAR TO YEAR CHANGE		1.79	1.20	3.08	3.51	3.96

	Y1	Y2	Y3	Y4	Y5
TOTAL REVENUE AT Y1-Y5 R.E. TAX RATES	13517888.00	14289333.00	15190703.00	16190836.00	17220176.00
SURPLUS FROM PRIOR YEAR	0.0	0.0	0.0	0.0	0.0
TOTAL COST	13517890.00	14289334.00	15190704.00	16190838.00	17220192.00
SURPLUS AT Y1-Y5 R.E. TAX RATES	0.0	0.0	0.0	0.0	0.0

SUBSIDIARY DATA

		Y1	Y2	Y3	Y4	Y5
REVENUE/MILL		102199.87	106299.87	110499.87	114799.87	117999.94
COLLECT PERCENTAGE	99.00					
COLLECTED REVENUE/MILL		101177.81	105236.81	109394.81	113651.81	116819.87

APPENDIX C

PPBS Simulation

THE SIMULATION

PPBS - SIMULATION: A Test of the Feasibility of Adapting the IUPS - PPBS to the Pennsylvania State Department of Education's Program Structure

The Intermediate Unit Planning Study has developed a PPBS for local school districts which uses a program taxonomy developed under contract to the Fels Institute of State and Local Government at the University of Pennsylvania. This program structure as well as the procedures for implemention are described in the PPBS manual Educational Planning-Programming-Budgeting System Procedures Manual for School Districts - Version 2, Model 1. At the same time a PPB Program Structure was independently developed for the Pennsylvania Department of Education.

Because the systems were developed independently, the next logical step was to determine the degree of compatability that existed between the systems and the feasibility of adapting the local school district program structure to make it compatable with the State's. It was the purpose of this simulation to test the feasibility of making that adaptation and to test a proposed modification of the original PPBS developed by the Intermediate Unit Planning Study.

Procedures

The first step of the simulation was to study the Department of Education (DOE) Program structure and choose those elements of the structure that would likely have meaning and utility for the local school district and to

which all district expenditures could be allocated. Because the computer program for the IUPS - PPBS limits the number of programs to twenty-three (23), this was the limit of the number of programs chosen. The DOE structure consists of three levels, categories, sub-categories and elements. An attempt was made to choose those programs which correspond to the "elements" of the DOE's structure. When this was not reasonable, an attempt to use the sub-category of the DOE as a program in the simulation was made,where this was not reasonable, a "category" of the DOE was used.

For those programs which do not correspond to the "elements" of the DOE, provision was made to obtain this data by treating the "elements" as projects in the IUPS-PPBS. Of the twenty-three programs chosen, three (3) correspond to the DOE's categories, three (3) to the sub-categories, and the remaining seventeen (17) correspond the "elements". The programs were tentatively defined; these definitions and a brief description of the use of projects are found in the report "Program Definitions for the Modified School District PPBS".

After the tentative program names were agreed upon, the computer program was tested with data from a former pilot district to see if changes in the program and manpower names could be made economically and effectively. Although the data printout was nonsense, a study of the printout indicated that the changes were successful. A study of the computer program indicated that the order of the programs could not be made without some major changes in the computer program. Because of this limitation the order of the programs were kept constant in the simulation. It appears that all but a few of the programs can be re-ordered; this limitation on flexibility does not seem to affect the utility of the PPBS, but must be considered in the future if

the order of the programs becomes important to either the DOE or the local school districts.

To produce a printout with realistic data, a fictitious school district was created from a modified budget of a real school district in Pennsylvania. There was no attempt to make the budget and expenditures of the fictitious district coincide with the real one. The basic criteria of the fictitious budget was reasonable expenditures in the programs and enough allocations to test and illustrate the use of projects to show how allocations for the "element" of some of the programs could be expressed. A final major criterion of the data was to make the simulation and printout as simple as possible. Because the more complicated procedures in the PPBS have already been demonstrated as workable in the pilot district from previous years, it was not considered necessary to demonstrate them further.

Data were developed for all the programs except Employee Benefits and Social Services. Social Services was omitted because the real school district used as a model had no discernible Social Services program. Employee Benefits was omitted because these costs were added to the salary costs in the various programs as suggested by representations of DOE. However, the Employee Benefits program was kept in the system as an optional way to express these costs under the assumption that school districts may desire to treat these costs as a separate program particularly with the advent of the interest in labor negotioations.

Illustrative data were developed for the following four (4) projects or "elements" of programs:

Early Childhood Instructional Media

Elementary Education Instructional Media

Secondary Education Instructional Media

Secondary Education Extra-curricular Activities

These were developed to illustrate and test the ability to show costs of sub-programs (elements) using the project technique.

The Input for the Programs

For each program, data for the current year budget allocations for Salaries, Non-Salary, and Capital Outlay is required. These data were obtained by cross-walking approximate allocations from the line item budget of the real district to the program budget of the fictitious district. Listed below are the costs for each of these programs.

Program 1, Executive Office, $457,854 were allocated for salaries. This represented the salaries and employees benefits of the professional administrators, administrative staff, principals, and clerks involved in the program. $23,400 were allocated for non-salary expenses and represents costs of materials, expenses, auditors, contracts, and attendance expenses. No allocations were made for capital outlay.

Program 2, Long Range Planning, $27,713 were allocated for the salaries and employee benefits of the professional staff and clerks. $4,400 were allocated for non-salary costs which included expenses, and materials and supplies. No Capital Outlay allocations were made.

Program 3, Public Relations, $16,050 represents the salary cost of one professional staff member and $6,600 represented the non-salary costs of materials and supplies, expenses, and contracted services. No Capital Outlay costs were allocated.

Program 4, Social Services, No costs were allocated.

Program 5, Intermediate Units, $29,500 were allocated for non-salary costs. This represents a direct payment to the Intermediate Unit which is a direct assessment by the Intermediate Unit Board. No salary or capital outlay costs were allocated.

Program 6, Early Childhood Instruction, $227,461 were allocated for salaries of the teachers, librarians, clerks, and educational specialists. $38,000 non-salary expenses for testbooks, supplies, library books, other supplies, other expenses, and contracted services were allocated. The $144,800 capital outlay allocation represented the capital costs of instructional materials, rents on capital equipment, sites, buildings, sinking fund, and authority rentals.

Under this program a project for instructional media was developed. $6,420 was allocated for salary of the instructional specialists involved in handling and the development of instructional media. $5,400 was allocated for non-salary costs.

The costs for this program and its project were arrived at by crudely prorating the costs of the line items over this and other instructional programs. In actual practice the budget official would have data available to do accurate pro-rating, but, the use of refined pro-rating techniques were not considered necessary for this simulation.

Program 7, Elementary Instruction, Using crude pro-rating, $1,528,458 was allocated for the salary costs and benefits of the teachers, librarians, other instructional staff, and clerks in the Elementary Instruction Program; $91,300 were allocated for the non-salary costs of textbooks, teaching supplies, library books, other materials, other expenses, and contracts;

$759,000 represents the pro-rated capital outlay costs for equipment replacement, rent on capital equipment, sites, buildings, purchase of educational equipment, sinking fund, and authority rentals.

Under this program there is one project, Instructional Media. $5,350 were assigned for the pro-rated salary costs and benefits, and $15,000 were pro-rated for the non-salary costs of A. V. materials. No capital outlay costs were assigned.

Program 8, Secondary Instruction, Using the same pro-rating techniques of the same line items as in the other instructional programs, $2,224,610 was assigned to the salary costs, $135,500 was assigned to the non-salary costs, and $943,476 to the capital outlay costs. Two projects were developed for this program. $5,350 salary costs and $15,000 non-salary costs were allocated to the Instructional Media Project.

$13,000 were allocated to non-salary costs of an Extra Curricular Activities Project. This sum represented the contribution to the student activities fund. No salary or capital outlay costs were allocated for this project. This project does not correspond to any of the "elements" of the DOE structure. It was used to illustrate how sub-programs that may be of interest to the school district but not the DOE can be treated.

Program 9, Vocational Technical Instruction, The Real school district had no vocational technical program in the district and made payments to the area vocational technical school. This sum $8,250, was allocated to the non-salary cost of the program. No salary or capital outlay costs were allocated.

Program 10, Special Instruction, Salary costs for the special education teachers of $93,630 were allocated for this program. $10,076 represen-

ting the cost of teaching supplies and payment to county classes were cross-walked to the non-salary costs. Capital outlay costs of $60,000 were assigned to this program.

Again the costs were pro-rated using crude estimates derived from student enrollments, number of teachers, and guess.

Program 11, Compensatory Instruction, Although there was no evidence from the data available that the real school district had a compensatory instruction program, eighteen (18) teachers were arbitrarialy assigned to such a program in the fictitious district. Starting with the eighteen teachers and pro-rating costs of the other items, $197,862 were assigned to salary costs, $21,300 to non-salary costs, and $45,968 to capital outlay.

Program 12, Guidance, The salary cost of $162,212 represents the salary and benefits for the guidance counselors; non-salary costs for expenses and materials and supplies of $7,500 were assigned to the program. No capital outlay costs were allocated.

Program 13, Health Services, The salaries of physicians, nurses, dentists, and medical and dental clerks allocated for the program were $96,461. The non-salary cost of $7,900 included dental supplies, medical supplies, dental contracted services, and medical contracted services. No capital outlay costs were allocated.

Program 14, In-Service Training, A non-salary sum of $10,500 were allocated for In-Service Training expenses. No salary or capital outlay costs were allocated.

Program 15, Legal Services, There were no salary or capital outlay costs allocated for legal services. Contracted legal expenses amounting

to $2,800 were allocated as the non-salary costs.

Program 16, Psychological, Salary costs of $39,950 were allocated for the salaries of the staff psychologists. No non-salary or capital outlay costs were allocated.

Program 17, Boards and Commissioners, The only salary cost for Program 17 was $800 for the Board of Education Secretary. Of the $62,200 allocated for non-salary cost, the bulk, $58,000 was for tax collection; the remainder was for materials and expenses. No capital outlay costs were allocated.

Program 18, PPBS, The salary cost for the program, $10,700 was for the pro-rated administrative staff and clerical personnel. The non-salary cost, $1,300 was for materials and expenses. No capital outlay costs were assigned.

Program 19, Transportation, The salary cost of $200,839 represents the salary and benefits for the pupil transportation supervisor, bus drivers, mechanics, and service personnel. The non-salary cost of $52,500 includes the allocation for gasoline, oil, tires and tubes, parts, materials and supplies, insurance, rentals, other expenses, and contracted maintenance. The $10,000 capital outlay represents equipment replacements.

Program 20, Food Services, $11,770 salary cost for the food service personnel was assigned to this program. The $2,600 non-salary expenditures were for materials and supplies. The capital outlay cost of $10,000 was for equipment replacement.

Program 21, Maintenance and Operation, The salary and benefits for maintenance engineers, custodians, and maintenance workers make up the $289,328 salary cost for this program. The non-salary cost for materials

and supplies, fuel, other expenses, utilities, and contracted services amounted to $289,610. No capital outlay allocations were made.

Program 22, Employees Benefits. No monies were allocated for this program because the option to add these expenses to the salaries in the other programs was chosen.

Program 23, Systems Design and Operation. The salary for the administrative staff involved in data processing and handling makes up the $10,700 salary allocation for this program. Non-salary costs of $1,000 were for materials and supplies; the $5,100 capital outlay was for data processing equipment.

Treatment of the Data

Although the data for the programs described above is purely fictitious and the costs that were pro-rated are crude estimates, it is reasonable to assume that in a real school district accurate data for each of the programs could be obtained from the current files. In the belief that the data were reasonable, they were entered into the computer version of the PPBS with supplementary data which were available from the real district.

The program projects the basic program costs over a five-year period based upon an inflation percent which is part of the input. The related manpower and indicators are projected; then the program projects the adjusted costs with related manpower and indicators. This second projection is made by adjusting both for inflation and the projected enrollments which were input into the system. Finally the total program costs for the current year are calculated and projected. The total costs for the current year are calculated and projected. The total costs for the current year are made by first determining the cost of the projects ("elements") then adding them to the cost of the program which is affected by the pro-

ject. The projections are made using the same techniques that are used for the adjusted costs.

Results of the simulation

The attached printout for the simulation illustrates the simplest type of results received from the system. The following discussion of the printout is confined to a description of the features relevant to the simulation. A detailed description of the printout and computer program can be found in the original PPBS manual referred to earlier.

Page one and two of the printout concerned with enrollments and costs held constant are for the most part a printing of input data and calculation of some weights to be used later in the program for projection of program costs.

Page three which takes up two printout pages lists the current year (CY) and projected cost for each program. The Salary (S), non-salary (NS), and capital outlay (CO) for the current year were input and the total (T) was calculated. The year one (Y1) through year five (Y5) costs are the projected changes due to inflation. It should be noted here that the costs here do not include the project ("element") costs. For this simulation the debt service was pro-rated over the programs although this could have been treated separately. The total costs for the CY through Y5 are calculated and entered at the bottom.

Page four of the printout lists the manpower types with the turnover rate. The current year manpower figures and turnover rates are input data. The turnover rate for teachers is an input as an indicator (see indicator 7, page 5 of the printout). From the number of current personnel in each man-

power type the number of positions (P) is printed. Using the turnover rate the number of people to be hired (H) is calculated. These are totaled and printed at the bottom of the page.

Page five shows the indicator calculations. Those indicators that include costs per pupil staff per pupil and enrollment are calculated, the others represent input data. The subsidary data are also input data, except, cost of materials, library books and supplies are inflated for year one through year five.

Page six shows the calculated per pupil cost for various programs for the current year and projections from year one through year five. Note that for the employees benefits the fixed charges ratio to total salaries is 0.00. This is because the option to add the employees benefits to the salaries in the programs was used. If the Employee Benefits program were used this would show the percent salary costs that were used as employee benefits.

Pages seven through nine presents the same current year information as pages three through five. The difference is in the projections; the adjusted costs which are projected for year one through year five by adjusting for enrollment as well as inflation.

Page ten begins the computation of the total program costs which will include a presentation and projection of project ("element") costs. Note here that this is where sub-program or "element" costs are presented. In this simulation only four projects are presented to illustrate the technique, but the actual limit of the computer program is 99 which should be adequate to show the necessary elements as well as other projects that the school officials may want to consider in planning.

The computer prints the name of the project or element, "Early Childhood Intructional Media 1005"; this was an input. Next the number of classrooms and the year the project begins is printed; this also was an input. The name of the program changed or affected is printed and under this is printed the manpower needs and costs. The manpower needs for each type associated with the program is input for each year. The current year costs for salary, non-salary, and capital outlay is also an input. The cost projections for year one through year five are calculated.

Pages eleven, twelve, and thirteen show the same information about the other three projects ("elements") used in this simulation. The information was arrived at in the same manner it was for the first project.

Pages fourteen, fifteen, and sixteen presents the same type information found on pages seven through nine and three through five. However, this information differs from the previous sections in that the total program costs include the costs of the projects. Also, the manpower data includes the manpower changes associated with the projects.

Pages seventeen begins the revenue forecast and revenue feasibility portion of the system. There was no change in the logic or techniques of this portion in the simulation therefore a discussion at this time is not relevant. A detailed discussion of this section is also found in the procedures manual referred to earlier.

Discussion

In this simulation no attempt was made to further test those characteristics and procedures of the PPB System that had been demonstrated in the original pilot districts. What has been tested in the ability to change

the program structure and use the concept of projects affecting programs to calculate selected sub-programs or "elements". There is no reason to believe that modifications in program structure or the use of projects to show sub-program costs will prohibit the user from employing the planning concepts and techniques originally designed for the system.

On the basis of this simulation it is the opinion of the investigator that the program structure tested can be used by the local school districts in the PPBS developed by the Intermediate Unit Planning Study. The program structure used in the test appears to be adequate in that there were no allocations from the line item budget that could not be reasonably cross-walked into the program budget. It is likely that when and if these modifications are piloted and field tested that further program modification may be necessary. It is believed that future modifications of the program structure can be made if necessary.